

MAR 10 1955

March 1955

Management

methods

PRACTICAL SOLUTIONS TO MANAGEMENT'S PROBLEMS

Human research: More will to work

Tax dollars can finance
an employee trust

Where they work **THE PRESIDENT**
OF MANUFACTURERS TRUST CO. (cover photo)

THE LIBRARY OF
CONGRESS
SERIAL RECORD
MAR 14 1955

Copy



ROUTE To
see pages

To
see pages

To
see pages

To
see pages



Generalaire No. 1960F,
in Pine Frost Green.

Generalaire.

in your choice of decorator colors

46 smartly-styled models, efficiently designed and sturdily built for a business lifetime of wear

Picture in your own office this smart new Generalaire, finished in Pine Frost Green! Or you can have it in Gray, Suede Brown, Autumn Haze, Glen Green or Manila Tan—with harmonizing Velvolum or Textolite writing top.

These are the decorator colors in which GF now offers modern metal desks. They bring freshness and new life into any office. They convert drab monotone clerical areas into interesting, inspiring places to work.

As for the GF Generalaire desk itself, it incorporates too many new *exclusive*

features to name here. But of this you may be sure: It has everything you'd expect in a much costlier desk... plus some efficient features you won't find even in far more expensive desks. This metal desk can't split or warp, its drawers will never stick, its solidly-welded joints can't come loose. Year after year, from the day you buy a GF Generalaire, it will be as handsome as it is today. That's real economy!

There's a GF Generalaire for every office job... 46 models... and the best way to choose is to see them for your-

self at your nearest GF Dealer or factory branch showroom. For an illustrated folder, write The General Fireproofing Company, Department M-42, Youngstown 1, Ohio.

© GF Co. 1955



MODE-MAKER DESKS • GOODFORM
ALUMINUM CHAIRS • SUPER-FILER
MECHANIZED FILING EQUIPMENT •
GF ADJUSTABLE STEEL SHELVEING

GF metal business furniture is a good investment

(Circle 274 for more information)

Management methods

Publisher
Jerome W. Harris

President
William S. Kline

Editorial Staff

Editor: J. W. Harris
Managing Editor: Ira J. Bilowit
Art Director: Laurence Lustig
Editorial Consultant: Leslie M. Slote

Business Staff

General Mgr.: W. S. Kline
Advertising Mgr.: Charles L. Dermott
Western Adv. Mgr.: William S. Hutchings
Office Mgr.: Edith Pagnotta

Advertising Offices

New York 17—141 East 44th Street, MU 7-0583
Chicago 11—612 North Michigan Avenue,
DElaware 7-0112
Los Angeles 5—Robert W. Walker Co., 2330 West Third
Street, Dunkirk 7-4388
San Francisco 4—Robert W. Walker Co.,
57 Post Street, Sutter 1-5568

A publication of MANAGEMENT MAGAZINES, INC.
141 East 44th Street, New York 17, N. Y., MU 7-0583

President and Treasurer, W. S. Kline; Vice President and
Secretary, J. W. Harris; Vice President, A. J. Kaiser.

BPA

Member of Business Publications Audit

SUBSCRIPTIONS: In United States and Possessions, one
year \$5.00. Canada, one year \$6.00. Single copies \$3.00.
Copyright, 1955 by Management Magazines, Inc. Ac-
cepted for mailing under Section 34.64 P.L.R. at
United States Post Office, East Stroudsburg, Pa.

FEATURES

- Why organization charts don't work 9
- Capsule reports: Providing workers with more will to work 12
- How to distribute pay checks 20
- Tax dollars can finance an employee trust .. 21
- How a master account card simplifies addressing, billing, posting 27
- What management should know about industrial health programs 30
- 3 ways to air condition older office buildings 39
- Where they work: Horace C. Flanigan 42
- Summer jobs screen students for permanent positions 48
- Permanent building veneer of "sprayed-on" plastic 49
- Using isotopes for business 50
- Multi-copy payroll form 58

DEPARTMENTS

- Consensus: Electronic briefs worth repeating 4
- Sales ideas: How to select sales personnel . 7
- Thought starters: 35
 - Defective punched cards are "ironed out" by new machine
 - Vinyl plastic job ticket holders save costly replacements
 - Internal "advertising" improves precision quality control
 - "Automatic secretary" takes orders when offices are closed
 - Disciplinary demerit system cuts workers' absenteeism
 - Reporter form helps create inexpensive house organ
 - Firm mechanizes purchase order writing with duplicating unit
- Planning ideas: 44
 - Fireproof plant design reduces insurance premiums
 - 1½ acre ceiling paint job completed in one weekend
- New products for planning 46
- Clippings: New products for the office ... 52

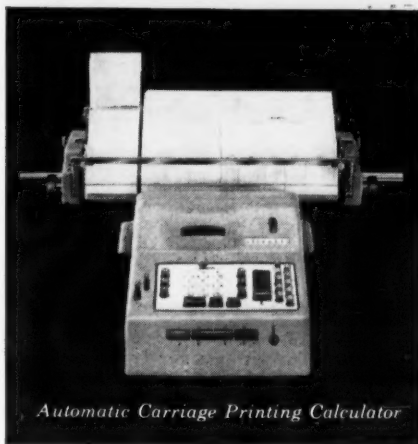
Policy re manuscripts: The object of **MANAGEMENT METHODS** is to offer "practical solutions to management's problems." For that reason we never highlight a problem without offering at least a partial solution or a recommended course of action. Whenever possible, we like to offer the reader something he can do right now to correct a procedure or solve a problem in his business.

Much of our editorial material comes from business and management specialists as well as from active businessmen at all levels of management.

Most articles employ case histories. An article may be based on a single case history or can be built around a group of related case histories. We like to mention the name of the user company involved in each case history and, when possible, to quote an officer of the company.

We endeavor to return all manuscripts. However, we assume no responsibility for material not specially requested by us.

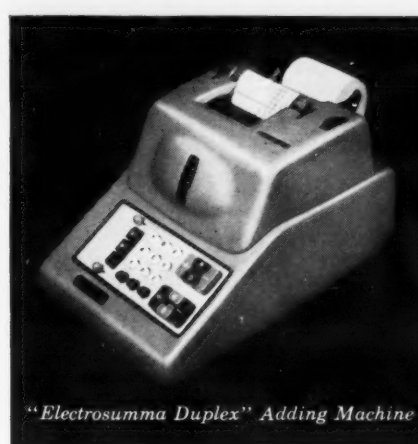
MAR 10 1955



Automatic Carriage Printing Calculator



"Electrosumma 14" Adding Machine



"Electrosumma Duplex" Adding Machine



Unique. The Olivetti Printing Calculator, at left, the first printing calculator to have a separate multiplication keyboard, is uniquely and completely automatic. It multiplies automatically without requiring the operator to position the multiplier; all mental counting is eliminated; fast short-cut multiplication is automatically used. It divides automatically without requiring the operator to count digits, for positioning; locating the decimal point is simple. This versatile machine is also a fast 10-key adding machine, with direct subtraction and automatic credit balance. Double and triple zero keys, and new discount key, add extra speed. It prints a complete tape record of all calculations, providing permanent proof that is quickly and easily audited. Proven in 7 years of use, the Olivetti Printing Calculator has a lower cost maintenance contract than any comparable machine. 20,000 are in use in the U.S.A. today, sold and serviced by Olivetti branch offices and by 450 dealers, in all 48 states. Have you investigated work-saving Olivetti machines?

olivetti

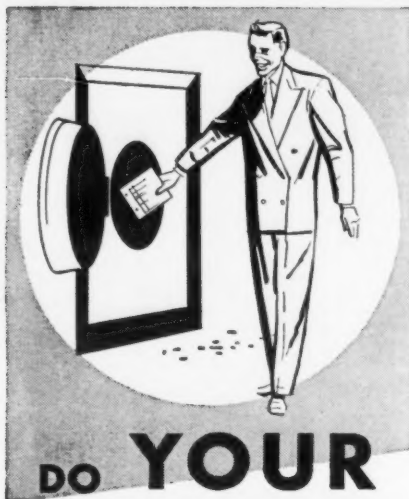


(Circle 292 for more information)

Olivetti Corporation of America
Dept. EH, 580 Fifth Avenue
New York 36, New York

Gentlemen: I'd like to know more about your Printing Calculator that makes figure-work quick, easy and automatic. Without obligating me in any way, please let me have this information as soon as possible.

Name.....
Title.....
Company.....
Street.....
City.....State.....



DO YOUR BUSINESS FORMS HAVE *Secrets?*

If you WANT CONFIDENTIAL information omitted from certain pages of your business forms, use the modern, efficient, foolproof method:



By a special American Lithofold process *desensitized areas* ("Secret Spots") effectively prevent entries from carrying through, regardless of pressure. Many advantages over block-outs, cut-outs, carbon spots and other previous methods!

- Provides *positive, accurate deletion* of desired information
- Applied *anywhere on the carbon paper*—in spots of any number, size and shape
- Can be *varied* for each part of the form
- Does not *deface* or soil the form
- Leaves *open areas* available for printed instructions, advertising, records, etc.

Available on:
LITHOSTRIP marginally punched,
continuously interleaved forms
LITHOSET one-time carbon sets

WRITE TODAY for full details and
FREE SAMPLE SET

AMERICAN
Lithofold Corporation
500 BITTNER ST. ST. LOUIS 15, MO.
(Circle 322 for more information)

consensus

ELECTRONIC BRIEFS WORTH REPEATING

How fast does it pay for itself?

Dear Mr. Editor: I read with a great deal of interest your article in the January issue entitled "What Management Should Know About Electronics for the Office."

One thing that has me puzzled is your statement . . . which reads, "The price of electronic data processing equipment is consistent with its ability to provide a proper rate of return. Example: a \$1,000,000 computer system will pay for itself in three to four years, if it replaces only fifty clerical employees."

\$1,000,000 is a lot of money. I was just wondering how you figured that amount could be recovered in three to four years, if the equipment replaces only 50 clerical employees. On the basis of \$4,000 a year each, or \$200,000 for the entire 50 in one year, only \$800,000 would be spent in salaries in four years, leaving a deficit of \$200,000. Are there other factors that govern your thinking which I may have overlooked and which may materially affect operating costs? In other words, just how did you arrive at your conclusion of this \$1,000,000?

J. D. ANDERSON, *Manager, Systems and Procedures, Sunbeam Corp.*

Using the example of \$4,000 a year salary, which is probably high as an average, it is still necessary to add the cost of fringe benefits, space, utilities, and supplies and equipment. We believe this comes to a total cost of at least \$5,000 a year per employee. In many cases, individuals being replaced by electronic equipment have high skills and high hourly rates. They include Comptometer operators, IBM technicians, etc. In addition,

these people must be supervised—another "hidden" cost. Ed.

Fast pay-out on investment . . .

A record rental fee of \$3,800,000 a year is being paid by Prudential Insurance Company to IBM for their electronic system. Prudential will use it to calculate commissions to agents, to compute risks, in addition to many other operations. It will replace 200 clerks formerly needed in one department.

Labor ready to fight

CIO wants a major Congressional investigation to force open the books of such leaders in automation as General Motors and General Electric. They want to show how much automation has eliminated labor and kited profits.

United Automobile Workers, CIO, is going to make automation a central issue in its upcoming drive to win a guaranteed annual wage from the car industry. This is likely to be one of the most crucial labor fights since World War II. DOUGLAS LARSEN, *NEA Staff Writer, New York World-Telegram & Sun*

No more payroll peak periods

General Electric's UNIVAC will be used to turn out pay checks for 15,000 workers. Time card information is fed in on magnetic tape—a one-girl operation. Six hours later, with infinitesimal errors, checks for all 15,000 employees will be printed.

John Hancock gets its computer

On December 8, 1954, the first of a new type of "business minded" electronic brain went into opera-

tion in the offices of the John Hancock Mutual Life Insurance Company. Technically called an "electronic data processing machine, type 650," it is number one of more than 400 scheduled for delivery in the next 2 years by IBM.

Within an hour after the machine was delivered, it was at work testing a new system for the calculation of commissions involving more than 7,000 John Hancock agents around the country.

Other work already translated into machine language by John Hancock experts, and nearly ready to go, includes policy valuation distributions, the preparation of mortgage tables three years in advance, and the computation of cash values and dividends for over 300,000 policies every month. The latter job reduces the number of steps in former accounting procedures by more than 80%.

According to Abram T. Collier, personnel vice president, "This machine is a welcome addition to our staff. Without the steady improvement of office machines and procedures, thousands of additional people would be required to do the most routine work."

Hancock's vice president says . . .

" . . . I have not yet touched upon the personnel problems which evolve out of (electronic installations). We all know that any realignment of function or the introduction of radically new procedures results in a considerable displacement of personnel. Many jobs change in content so drastically as to be unrecognizable, others disappear entirely, their functions being either eliminated or absorbed.

At the clerical level, while this presents some difficulty, that difficulty can be handled. Clerks can be restrained for the new procedures and any necessary reduction in clerical quotas can, under ordinary circumstances, be taken care of by the normal turnover most of us experience.

The real rub, however, comes

methods

about through the changes in supervisory requirements. All of our companies have numerous section heads, supervisors, and perhaps even division managers who have spent their whole working lives developing the experience, knowledge, and skills necessary to the positions which they have attained. What happens to them when new procedures or large-scale mechanization programs either require completely different skills or knowledge, or worse yet what happens when these changeovers completely eliminate these supervisory positions? What responsibility does company management have toward these individuals?

I don't believe we have developed any final and satisfactory answers to these questions as yet. Certainly, we have a great responsibility toward such individuals, who for so long a period, were the backbone of our organizations. Everything must be done within the limits of possibility to train these people for new assignments. If this is not practical, I feel that we have an obligation to find new and interesting work for such individuals without impairing their opportunity for advancement, while at the same time providing them with that recognized job essential—work satisfaction."

NOEL S. BAKER, Vice President, John Hancock Mutual Life Ins. Co.

New electronic inventory machine

A new electronic business machine by Electronics Corporation of America — "Magnefile, Type C" — is designed to keep perpetual inventory and record withdrawals and sales without the use of cards, tape, or other external media. It is designed for use in any business organization where fast turnover necessitates accurate, perpetual inventory records on a day-to-day or hour-to-hour basis. It performs a number of important and useful business accounting functions, such as payroll accounting, sales analysis, production scheduling.

As a point-of-sales recorder in a



Globe-Guard "7000" Line Files equipped with famous Tri-Guard Filing Principle.

you'll find GLOBE-WERNICKE office equipment everywhere !

Globe-Guard Files offer the highest standards of quality and beauty in every detail of design, construction and finish. They incorporate every conceivable feature to make day-to-day filing easier and more efficient. Globe-Wernicke's exclusive concealed trigger latch releases the drawer at the slightest touch of the hand, and progressive ball-bearing roller slides assure smooth drawer

movement. As an optional feature, an automatic locking device can be installed to secure all drawers simultaneously. All these features and many more mean *better filing in less floor space with lower operating costs*. It will pay you to consult your Globe-Wernicke dealer about Globe-Guard Files. He's listed in the "Yellow Pages" of your phone book. Or write us direct.



CINCINNATI 12, OHIO

MANUFACTURERS OF THE WORLD'S FINEST OFFICE EQUIPMENT, SYSTEMS, FILING SUPPLIES AND VISIBLE RECORDS
(Circle 275 for more information)



"Great system—Gets everybody in by ten o'clock"

Keep the coffee-break in your control

You *could* control the "coffee-break" this way—but fortunately, there's a much better method available.

Rudd-Melikian, Inc. can provide *complete* control of the "coffee-break" at no cost to management. R-M dispensers—completely

automatic—serve delicious, hot Kwik-Kafé coffee, cold Coca-Cola, Pepsi-Cola, Minute Maid orange juice or soft drinks. "Coffee-break" time is reduced to a minimum and workers remain in their own work area. Service is supplied by your local factory-trained R-M distributor.

Remember—you don't have complete control unless you have Kwik-Kafé. Clip the coupon—write us today!



Rudd-Melikian, Inc.,
1949 N. Howard St., Phila. 22, Pa.

Gentlemen:

☐ Please show me how to control the "coffee-break" with R-M dispensers. Booklet MM 2.

Name.....Firm.....

Street.....

City.....Zone...State.....



RUDD-MELIKIAN, INC.

CREATORS OF AN INDUSTRY

(Circle 308 for more information)

consensus...

continued

department store, for example, it maintains, in its magnetic memory, complete inventory information on 10,000 different items; it reads a tag which the sales clerk has removed from the item just sold, completely identifying the item; it figures out the total price for the quantity the customer has purchased; it adds Federal and local taxes; and it automatically typewrites a complete sales slip,



bearing all pertinent information. It also computes and remembers the number of items remaining in stock after subtracting this sale, the sales clerk's dollar sales volume, and the items which must be reordered. It prints information at the end of the day covering the entire inventory of a list of items.

No larger than an office desk, it is a completely self-contained unit requiring no auxiliary equipment. For more information, circle number 399 on the Reader Service Card.



Booklet explains new language

Many businessmen are baffled by, and a little impatient with, the growth of "engineeringese" language. One firm, whose own automation engineers have contributed heavily to this polytechnical polyglot, decided to try and clear up some of the confusion. Surveying the technical terms most broadly used, the Industrial Division of Minneapolis-Honeywell packaged them in a modest "Automation Dictionary" complete with very clear, layman-like definitions.

For a free copy, circle number 398 on the Reader Service Card.

sales ideas

How to select sales personnel

Four million persons are employed in sales jobs in the United States today—an average of one out of every 16 employed workers, according to Industrial Psychology, Inc., national psychological research organization. Considering this sizable number of sales personnel, plus their importance in the profit-loss structure of a company, good selection methods are an essential.

Four job categories can be designated under sales personnel, as indicated by psychological standards: the sales clerk, or *order taker*; the salesman, or *order seller*; the sales engineer, or *order consultant*; the sales supervisor, or *order coordinator & administrator*.

The *sales clerk* carries out job assignments of a simple, routine, and repetitive nature. More stress is on the clerical aspects of the transaction than on the sales or persuasive aspects. In terms of the psychological requirements, the paper-work aptitudes of perception and systems show up as important. An extroverted personality is necessary, though not at the same level as the salesman. Appearance, plus general maturity and stability, are required in sales clerks, as in other sales classifications. Only a short training time is required to reach sales clerk proficiency, providing the trainee has the right amount of the sales clerk aptitudes. This job is often the entry job in the sales field—though not always correctly so for salesmen who are persuasive-oriented and have a dislike

for paper work and details.

The *salesman* job, from a psychological standpoint, is also a fairly routine, repetitive, and detail assignment. High intelligence for salesmen is not desirable; and overqualification is an easy mistake to make in hiring a sales force. As contrasted to the clerical *order taker*, however, the salesman is an *order seller*. More stress is on the sales-contact aptitudes and personality traits, than on the paper-work aptitudes. Successful salesmen score above the general population on such personality traits as cooperativeness, dominance, enthusiasm, gregariousness, conventional attitude.

The *sales engineer* is a specialist in a particular and fairly complicated product. He serves in an engineering or consulting capacity. Stress is on the technical aptitudes, more than on the sales or paper-work aptitudes. The sales engineer needs more intelligence than the salesman. His personality traits do not have to be as pronounced as the salesman, but he does have to have the extrovert syndrome. Any engineer is not, by definition, a sales engineer—the statistics are that about one out of ten engineer graduates have the personality and temperament to be sales engineers.

The *sales supervisor* is a line administrator—dealing with, directing, and coordinating projects and personnel; organizing and expediting work; getting things accomplished. His main task is predicting and controlling peo-

GERBER — babies are their business — cotton is their choice



Fairfax towels used by Gerber Products Co. are supplied by Banner Linen Service, Grand Rapids, Mich.



• Main factory of Gerber Products Co., pioneers of moderately priced baby foods, is located at Fremont, Michigan. Here, and at all Gerber plants, cleanliness is the first order of business. One sure sign of it is the *cotton toweling* in all Gerber washrooms.

Sanitation starts with cotton. And employee relations is helped by it—for Gerber employees appreciate cotton's "at home" touch—its soft, absorbent quality.

Economy too, stems from cotton. You're spared inventory and storage headaches. Your restrooms are clean and uncluttered. You cut down on plumbing repair bills.

Whether you operate a factory, institution or office, why not clean up with cotton, too? For free booklet which tells what cotton towel service will do for you, please write Fairfax, Dept. G, 65 Worth St., New York 13, N. Y.

Here's How Linen Supply Works...

You buy nothing... your linen supply dealer supplies everything. The low cost includes cabinets, pickup and delivery, provides automatic supply of freshly laundered towels and uniforms. Quantities can be increased or decreased on short notice. Local service is listed in your classified book under LINEN SUPPLY or TOWEL SUPPLY.



Clean Cotton Towels... Sure Sign of Good Management

Fairfax Towels

A PRODUCT OF WEST POINT MANUFACTURING CO.—
WELLINGTON SEARS CO., SELLING AGENTS, 65 WORTH STREET, NEW YORK 13

(Circle 317 for more information)

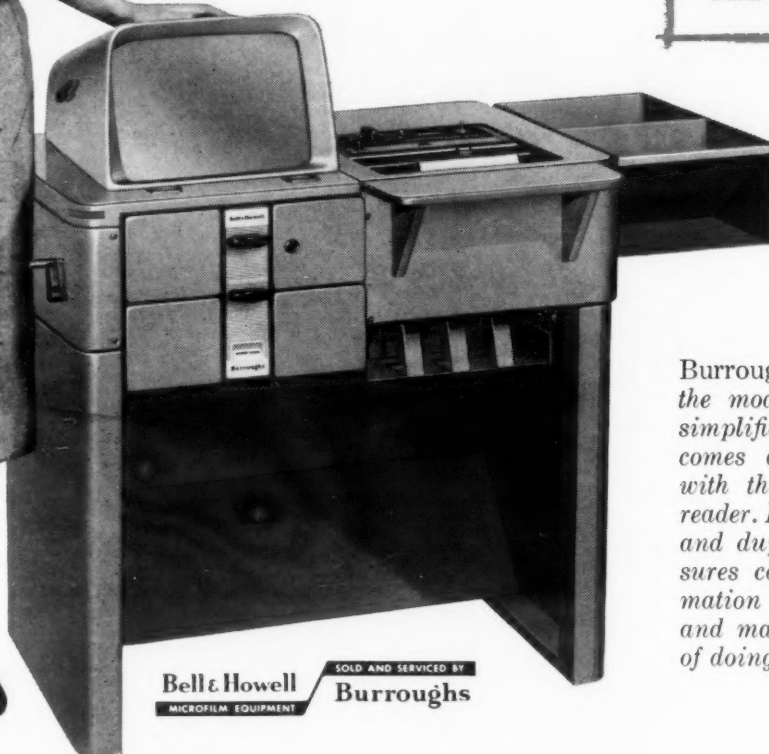


It's New!

MICRO-TWIN RECORDER-READER

complete low-cost microfilming

in one unit



Bell & Howell
MICROFILM EQUIPMENT
SOLD AND SERVICED BY
Burroughs

Now, small as well as large businesses can enjoy the time-saving, space-saving, money-saving benefits of microfilming... for the unique Micro-Twin combines both recorder and reader in a single compact unit at a price less than you might have expected to pay for a recorder alone!

The Micro-Twin, with its 37-to-1 reduction camera, records documents as wide as 11 inches on just half of the 16-mm film width. Documents can be photographed back and front simultaneously. Full-size facsimile prints can be produced quickly, direct from microfilm in the reader. For hard-to-read material, a 24-to-1 camera is available.

An optional Acro-Feeder provides rapid feeding

and accurate spacing—all automatically. The exclusive indexing meter is the last word in rapid location of filmed documents. The Micro-Twin does the complete, modern microfilming job, yet it is as easy to use as a box camera.

The compact Micro-Twin is available with the matching stand and work organizer, as shown here, or in a model that fits conveniently and securely on a work table or desk.

Why not find out about the many ways *your* business can profit with the Micro-Twin? Just phone your near-by Burroughs representative for the complete story. Burroughs Corporation, Detroit 32, Michigan.

Burroughs Micro-Accounting—the modern business science of simplified accounting—now becomes a low-investment reality with the Micro-Twin recorder-reader. It eliminates wasted forms and duplicated motions... assures complete and exact information for speedy reference... and materially reduces the cost of doing business.

Wherever there's business there's **Burroughs**



(Circle 257 for more information)

ple. He needs more of the aptitudes than any of the other sales classifications, with particular stress on judgment and organization abilities. His personality structure is different from the salesman, with emphasis on traits such as expressiveness, super-ego strength, participation, self-sufficiency, and will-control.

Personnel evaluation has progressed sufficiently that a number of these basic sales traits can be spotted by psychological tests, administered by the company before the applicant is hired. Three types of screening forms are recommended by Industrial Psychology:

Biography. An application-type form, in which the applicant is asked 119 questions; and for each question, four answers are given. He selects the answer that fits him. A scoring method assigns weights to his answers and provides a total score. The salesman who scores 186 points is a better risk in terms of his biographical habit patterns than the salesman who scores 42 points. The form is also used as a guide in the interview. Tailored forms are available for sales and supervisor areas.

Aptitude Job-Tests. This series of tests gets at the aptitude (or brainpower) which the applicant has, to learn and perform the sales job. From five to seven tests are used in order to get at the various types of intelligence involved in sales assignments. Special combinations of aptitude tests have been researched out for the four job categories.

Personality. A good deal of "cold water" has been thrown on the field of personality evaluation in business and industry. One reason is that personality measurement has generally not followed basic factorial design in test development. Personality research, based on sound factorial test construction, is now being applied to sales prediction. Two tests which have particular significance in sales selection are the extrovert-introvert test, which gives a measure of the applicant's personality to do contact work, and a longer personality factor test which provides weighted scores on 16 basic factors to indicate personality structure for salesmen, sales engineers and supervisors.

For further information on the screening and selection of sales personnel, in terms of the psychological tests to use and how to install them, circle number 397 on the Reader Service Card.



Management's job must be defined by function — not title — to get results

by Leslie M. Slote,

Ass't to the Pres., Norden-Ketay Corp.
Management and Labor Relations Consultant

Editor's Note: This article is not a study of organizational charting. Rather, it details the place and importance of organizational planning and is a practical excursion into the field of "managing management."

Here is a scene that could occur in almost any "well run" manufacturing concern. Customers are clamoring for deliveries. The President sends for the Factory Manager. Five other people soon become involved and the conversation resolves itself into the following boiled-down version:

PRESIDENT: "Why aren't we shipping our new model in the Z line?"

FACTORY MANAGER: "We're all set to go in production, but are waiting for the balance of the tooling. Purchasing was supposed to have it in the plant 3 weeks ago."

PURCHASING AGENT: "Production Planning didn't requisition far enough in advance."

PRODUCTION PLANNING SUPERVISOR: "Product drawings were released late by Engineering."

CHIEF ENGINEER: "Sales wanted some changes."

SALES MANAGER: "It wouldn't have sold the way Engineering designed it."

The chain reaction of each department manager blaming the next for the inability to meet a production deadline is not so much the old familiar story of "passing the buck," as it is an example of carelessly divided responsibilities, and no over-all coordination to attain objectives. Although clear-cut goals were actually set up and the desire for teamwork is there, *the desired end results just don't always happen.* Regardless of the excuses given, production and shipments are off—not to mention the effect on profits and costs. The question is, why did it happen?

Basically, failure is due to lack of sound organization planning. But don't confuse the organization planning with organization charting. The organization chart shows "chain of command"—not "chain of function." It's a static profile of management structure. The primary purpose of organization planning is to get the work out—that is, *to get the job done.*

What is described here is a practical approach to this latter method. It is based upon activity analysis. It is not intended to eliminate the familiar

organization chart. The organization chart, with its complex maze of rectangles and connecting lines, depicts structural framework, while activity analysis shows what has to be done within this framework to complete a job, and specifies exactly which people are to handle each step.

Any size firm can use it

Activity analysis applies to all types of businesses regardless of size. The larger firm will show more specialization of functions with highly detailed breakdowns, and work assignments to many more individuals. The very *same functions* that are performed in the big corporation exist in the smaller organizations, too. The only difference is that they are combined and performed by fewer individuals.

To illustrate, take the case of a "one-man organization" familiar to all of us, the corner drug store. The marketing functions exist here with all its phases of market research, analysis, and appraisal in order to develop customer requirements and sales forecasts. Chances are, the proprietor may not even recognize the marketing function as such, and may even deny that it exists in his small organization. But he

has to know his trade, which products and price lines will sell, how much of each to stock, how to promote sales, and what to expect in the way of sales volume on each product. Similarly, the production function of supplying goods and services is also present, as are the financial function of capitalization, budgeting, accounting, and reporting.

It is important to recognize that organization "planning" has been accomplished, of necessity, in every going business. The structural framework and complex inter-relationships of personnel and functions exist, whether they are planned or not, however wrong or inadequate they might be.

I recently completed a survey of nineteen different companies to determine what they were doing with organization planning. Included were the following general categories:

Manufacturing—7

Electronics, control instruments, machine tools, office equipment, and home appliances.

Wholesale Trade—5

Covering various combinations of manufacturing, subcontracting, and marketing operations.

Service Organization—3

Banking, and insurance.

Mining—3

Chemical mining and processing, and oil refinery.

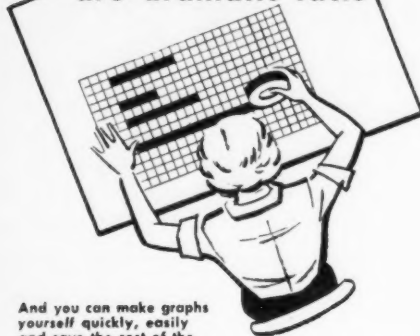
Public Utility—1

Electric power company.

In all cases, organization planning (though often called by a different name) is a centralized staff function with relatively little participation by operating executives. The usual effort is directed towards the production of detailed organization charts and an organization manual carefully delineating authorities and responsibilities. While the effort is commendable, it seldom achieves sufficient applicability to daily operating priorities that claim a busy executive's time. As a result, it becomes little more than an academic exercise—it remains a staff "baby" that never quite grows up. *(next page, please)*

GRAPHIC FACTS

are dramatic facts



And you can make graphs yourself quickly, easily and save the cost of the Kit with your first chart . . . without ever touching a pen!

Translating information into chart form is the best way to sell your story quickly and dramatically and NOW—with Chart-Pak—everything you need is printed on rolls of tape! You roll on dotted lines, bars, figures, dates. You can't make a costly error—it can be taken up as quickly as it is put down. The average charting time is minutes—the cost—far below \$1.00. And you or your secretary can do it.



A complete kit with twenty-eight 300" rolls of many patterns and colors is only \$34.50.

TRADE MARK **CHART-PAK, INC.**
 100 Lincoln Ave. • Stamford, Conn. • Dept. 96C
 Please send me Chart-Pak Method data on:
☐ Graphic Charts ☐ Office Layout
☐ Organization
 Name _____
 Company _____
 Address _____
 City _____ State _____ 1176

(Circle 320 for more information)

DO YOU KNOW HOW MUCH MISFILES COST YOU?

Millions of Dollars Are Lost Each Year by American Business because of Improper Record Management.

Record Controls offer, FREE TO YOU, an interesting and informative little folder on the cost of misfiles. It tells with shocking frankness what this most ulcerous of office habits costs, and presents a 12-point program on how to cure it.

Every executive who is responsible for files should have a copy for ready reference. Write for yours today — no obligation.

RECORD CONTROLS, INC.

A nationally-known skilled method for developing efficient records systems, featuring "on the job" training. We do not sell supplies or equipment.

209 S. La Salle St. Chicago 4, Ill.

516 Fifth Ave. New York City 36, N. Y.

(Circle 302 for more information)

Big help—in any business!

That's office equipment—from typewriters to electronic brains—a two billion dollar business that brings new speed and efficiency to industry each year.

Good opportunity for investors?

Perhaps.

But to help you decide for yourself, we've just prepared a 28-page report that makes rewarding reading for anybody interested in office equipment.

The report begins with an objective review of the industry as a whole . . . explores its past, present, and future . . . highlights some of the more important problems and opportunities that bear directly on the business.

Then it focuses in turn on each of 18 leading firms in the field . . . gives you facts and figures on sales, earnings, dividends—plus a pretty fair idea of just where each company stands today—and might stand tomorrow.

There's no charge for this report, of course.

If you'd like a copy of "THE OFFICE EQUIPMENT INDUSTRY", simply call, or write—

WALTER A. SCHOLL, Department MT-15

MERRILL LYNCH, PIERCE, FENNER & BEANE

70 Pine Street, New York 5, N. Y.

Offices in 106 Cities

(Circle 323 for more information)

ACTIVITY ANALYSIS CHART

Administrative goal

To coordinate sales requirements on the Z-line with factory operations through market research and analysis, sales forecasting, engineering the product, planning and scheduling production, and related functions.

Actions required

Ref.	Basic Functions	Reference	Sub-Functions	Dept.
1	Develop customer requirements and sales forecasts on each product in the Z-line.	1.1	Market research and analysis to forecast and evaluate territorial operations; and to prepare plans for marketing strategy.	Sales
		1.11	Conduct field research and define markets for each product in terms of sales opportunities (used as basis for company quota operations).	
		1.12	Develop strategic marketing plans, establish definite quotas and budgets by products, territories, time periods, etc., to attain a pre-determined profit on sales, manufacturing, and financial requirements.	
		1.13	Inspect and appraise all marketing plans, sales quota and budget performance, and act as a check on market research operations.	
2	Produce and ship products in accordance with Sales Dept. schedules to fulfill customers requirements.	2.1	Engineering research and development to plan the designs and processes required for manufacturing the product.	Manufacturing
		2.11	Conduct research in technical subjects to keep products and processes in advance of such trade requirements as cost, utility, efficiency, appearance, etc.	
		2.12	Design products and manufacturing processes to conform with product and process research to meet marketing requirements with respect to price and quality.	
		2.121	product design and specification; build prototype; revise product design; furnish bill of materials, drawings and specifications.	
		2.122	design operations sequence and set standard times for each operation.	
		2.123	specify tooling required.	
		2.2	Manufacture the product according to the designs and processes prepared by Engineering	
		2.21	Provide required tooling, facilities, materials, etc., needed for scheduled manufacturing operations.	
		2.22	Provide required personnel.	
		2.3	Inspect and appraise all expenditures and results of manufacturing operations.	
		2.31	Plan production schedules and budgets for all mfg. operations.	

Office of the Executive Vice-President

Delegated responsibilities

Dept.	Echelon	Position
Sales	Dept. Head	V.P.-Director of Sales
	Div. Head	Manager of Market Research
	Sect. Head	Supervisor of Market Research Operations
	Sect. Head	Supervisor of Marketing Plans (may be same individual as above —1.11.)
	Sect. Head	Supervisor of Market Analysis (may be same individual as above —1.11 and 1.12)
Manufacturing	Dept. Head	V.P.-Director of Mfg. Operations
	Div. Head (Engineering Research and Devel.)	Chief Engineer
	Sect. Head (Product and Process Research)	Sr. Project Engineer
	Sect. Head (Product and Process Design)	Sr. Project Engineer
	Unit Head (Production Engineering)	Project Engineer
	Unit Head (Production Engineering)	Project Engineer
	Unit Head	Project Engineer
	Div Head	Factory Mgr.
	Sect. Head	Purchasing Agent
	Sect. Head	Personnel Manager
	Div. Head	Mfg. Control Manager
	Sect. Head	Prod. Planning Supervisor

How can organization planning be made practical? *Primarily, through activity analysis, rather than position description.* Position description only covers the activities of a single person, while the activity analysis approach to organization planning outlines the authorities and responsibilities of every person participating in a given activity from start to finish. The chart at the left is only a portion of what an activity analysis chart would look like, with many of the steps omitted for purposes of clarification. Although the example given is broad in scope and concept, and cuts across departmental lines, these charts would also be used within the department itself to detail the functions and responsibilities of divisions, sections, and units to complete establishing effective controls.

The charts are flexible; they may be as broad, or as specialized and detailed, as required. Basically, the left-hand portion of the charts show all activities and functions necessary to achieve the desired administrative goal, while the right-hand part assigns specific responsibilities. As a last step, the responsibilities for each position are abstracted and transferred to individual position descriptions. As position descriptions are developed in this manner from different activity analysis charts, an organization manual is gradually built up as a *by-product*, rather than a primary objective, and, therefore, is a control in assigning responsibilities.

The activity analysis approach to organization planning and control produces positive results by simplifying activities, eliminating duplications, filling in omissions, etc.

This approach to organization planning is unique and deserves wider recognition. I have used it in numerous and diverse applications with consistently successful results. In the survey of 19 companies mentioned earlier, the most frequently encountered obstacle was the lack of understanding on the part of division heads, department heads, and top executives regarding the meaning and application of organization planning. It was found that ideas were either outmoded, were incorrect due to sheer guesswork, or expressed

ca- tulation to internal politics. In most cases, the concepts of any one operating executive were generally unacceptable to other executives due to lack of understanding, so that anyone attempting to conquer the hazards of organization planning was literally faced with insurmountable obstacles. The problem is one of seeking a common denominator for purposes of communication. This has been solved by training key personnel in the techniques of organization planning through the activity analysis approach.

A few of the leading universities offer courses in organization planning. For

example, N.Y.U.'s Division of General Education offers an outstanding course under the chairmanship of Professor Harold A. Finley. However, companies have almost universally ignored the value of in-plant training of its key executives as a group in the phases of organization planning relating to their daily operating responsibilities. Actual participation, under competent guidance, is one of the best means of providing a common basis of such understanding. Key personnel can thus become adept in the use of this valuable tool to enable them to solve everyday operating problems successfully. m/m

Program tape

FLEXOWRITERS

FLEXOWRITERS capture data in punched tape as documents are originally typed. This punched tape mechanizes the preparation of other records on FLEXOWRITERS or other tape-operated equipment . . . this is integrated data processing.

FLEXOWRITERS' common language tape actuates data processors, plate embossing machines, tape-to-card punches, communications machines, recording instruments and other **FLEXOWRITERS**.

Companies now using FLEXOWRITERS for integrated data processing include:

Aluminum Company of America	North American Aviation, Inc.
Carrier Corporation	Philco Corporation
Chrysler Corporation	U. S. Steel Corporation
Eastman Kodak Company	Westinghouse Electric Corporation

Ask for folio containing systems flow charts depicting how FLEXOWRITERS are used in actual installations.

COMMERCIAL CONTROLS CORPORATION, Dept. MM-35, 1 Leighton Ave., Rochester 2, N.Y.

☐ Send folio "How Flexowriters Integrate Data Processing."
☐ I would like to see a FLEXOWRITER demonstration.
☐ We are interested in FLEXOWRITERS for _____

Name _____
Company _____
Address _____
City _____ State _____

(Circle 263 for more information)

march 1955

THIS is
an **ACCO**
FASTENER

the basis
of better
filing...

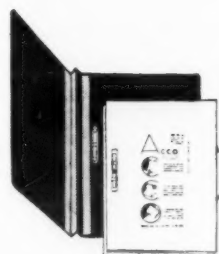


THE Acco filing system is based on the famous slogan that "Bound Papers Are Safe Papers." The Acco Fastener, alone or in Accobind Folders or Accopress Binders keeps all related papers together — correspondence, invoices, etc. — neatly but securely bound in loose leaf style. Let your stationer explain the Acco "file and find" system and you'll never use any other.



The Accopress Binder combines loose leaf convenience, large capacity and economy.

When transfer time comes just slip the bound papers from the Accobind Folder, insert a new Acco Fastener and the Folder is ready for another year's filing.



ACCOBIND folders

ACCOPRESS binders

PIN-PRONG binders

(for marginal multiple punched forms)

ACCO clamps

ACCO punches

and other filing supplies

ACCO PRODUCTS, Inc.

Ogdensburg, New York

In Canada: ACCO Canadian Co., Ltd., Toronto

capsule

HUMAN RELATIONS

reports

1 Should the boss work with the workers

Providing workers with MORE WILL TO WORK

EDITOR'S NOTE: A tremendous amount of research is being done today on human behavior. Behind this research looms the fact that human beings are the most expensive (and valuable) of our business assets. Unfortunately, much of this social research is being done by groups working independently of one another. Findings are not always published. Significant facts are often buried in long and highly technical reports. In addition, many of the researchers are reluctant to have their findings "popularized" by untrained observers who may distort them.

With these facts in mind, we have arranged with Dr. Donald A. Laird, an Industrial Psychologist, to collect and author the series of Human Research Studies we will publish in subsequent months. Dr. Laird was formerly head of the Psychology Department at Colgate University, and Director of the Colgate Psychological Laboratory. Later, he was appointed Director of the Ayer Foundation for Consumer Analysis, in Philadelphia.

The numbers that appear in parentheses refer to source material texts. These are listed under "Bibliography" on page 19.

ARE THE WORKERS more likely to reach a higher goal if the boss rolls up his sleeves and helps out at the bench beside them? The chart shows what happened in groups of semi-skilled office clerks and railroad laborers. Altogether there were some 600 workers, and 84 first-line bosses.

Half of these bosses spent more time supervising than helping out in actual production. The other half of the bosses spent most of their time working directly on the job, the same as the workers. The bosses who had the high output crews, were mostly those who did *not* do much of the production work themselves. But with the low production crews, it was the opposite—most of their bosses pitched in to help get out the work. (1)

This is difficult to believe at first. The crews were small, only about eight persons under one boss. When the bosses worked side-by-side with them, the crew strength was increased considerably. Yet it cut down output. How could that be?

One obvious reason is the workers' feeling that the boss lacks confidence in them, so he is working beside them. Or, they feel he is dissatisfied with the way they are doing the job, and their anxiety is aroused. They may also get the idea he is trying to set a faster pace for them. Workers commonly resent a boss "sticking his nose" into their work. All these feelings cut down the will to work, and make some of the workers jittery.

Another reason is less obvious, but it is more important in connection with helping the work group reach their goals. This reason is tied-in with the social forces that are active in work groups. Some of these social forces lead members to feel that they will reach their goals better if they have a leader, not merely another part-time worker. It is a truism that groups want a leader, although they may not want the particular one they happen to have.

Group members expect this leader they want to perform different operations from the rank-and-file. They expect the boss to

WHEN OUTPUT IS HIGH



72.5% of bosses "supervise" most of time

WHEN OUTPUT IS LOW



67.5% of bosses "work" with workers most of time

play a different role, not to do routine production. They expect him to facilitate their efforts and give them support toward reaching their goals. (2)

The work group expects their leader to: Have materials on hand when needed (*An Expediter*).

Get them good tools and surroundings (*A Retriever*).

Co-ordinate the members of the crew (*A Smoother-Outer*).

Help them solve personal problems (*A Counselor*).

Help them solve job problems (*A Consultant, or Expert*).

Keep them informed about what's cooking (*A Communicator*).

Defend their interests (*A Protector*).

Develop their skills (*A Trainer*).

They also expect the leader, if he is a successful one, to work harder and longer than the followers, but at those functions which they expect the leader to perform, not at the routine of their own jobs. (3)

In brief, workers expect the boss to be a specialist who helps them reach some goals. These specialties are in two broad classes: mobilizing the human resources within the group, and mobilizing the materials needed to reach the goal.

2 What happens when the boss lacks authority

WE HAVE SEEN how the followers expect their leaders to have "higher" duties, duties which are not done by the rank-and-file. These "higher" things include looking after the interests of individuals, as well as of the crew as a whole.

In terms of a work group, for example, this means going to bat for the crew; seeing that materials or equipment the group feels they need is provided so they can make headway; and settling complaints and grievances.

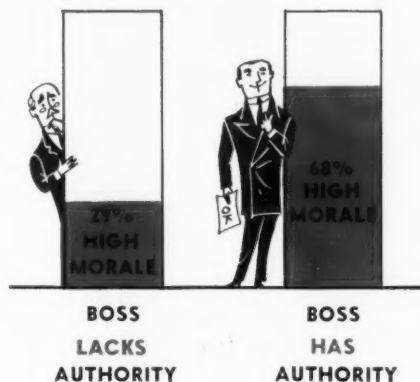
But the records indicate that going to bat is not enough. This finding came out in the analysis of the morale of 8,000 of the workers in a metropolitan electric firm. The over-all satisfaction, or morale, of the workers was checked against many of the first-line bosses' actions. Perhaps the bosses who used the most human relations methods would be found to have crews with the best morale.

The records didn't come out that way, however. Some of the foremen who used good human relations procedure did have high morale crews. But other bosses, who used about the same methods, had low morale workers.

So the investigators looked into another angle. Some of the bosses had influence with their higher-ups. The investigators found that when these bosses with high influence went to bat, they usually got what they wanted for their workers. Their workers felt that such a powerful boss could help them reach some goals, and this outlook seemed more satisfying.

But there were other bosses who seldom got an O.K. from the higher-ups. These low influence bosses couldn't make good on their promises to the men, though sometimes they foolishly promised too much. Generally, they simply lacked the weight to get management to approve their recommendations.

The chart shows the result this difference in influence seemed to have on morale with the blue-collar workers. There was no real difference in the human rela-



tions methods of these foremen. What counted was that some had (or could get) the authority to do the extras that helped their work groups feel they could get somewhere. (4)

The relationship in the case of the white-collar workers was about the same. Morale was highest where the immediate boss could make good on his promises and not have the rug pulled out from under him by his chief.

Experiments supported by the Research Institute of the University of Oklahoma have also revealed that followers have great expectations from the people they consider leaders in their groups. The followers greatly over-estimated how well these leaders could do a simple act of muscular skill, and they also underestimated the same skill for people they shunned as leaders. Feeling the leader has super-man qualities relieves anxieties. (5)

As companies have grown larger, there has been a tendency to "tighten the organization." A favorite way of doing this is to take some of the authority from the first-line bosses and give it to a staff expert. Nowadays, the first-line boss may not have the authority to adjust complaints, for instance. Similar limitations on his power have, in many instances, whittled-down his size in the workers' eyes so they doubt if he can really help them make headway.

Bibliography on page 19

*Your wisest choice
of them all...*

PHOTOSTAT



**Instant
Copier**
for use in every
office . . . anywhere!

ECONOMICALLY PRICED
at \$250
F.O.B. Rochester, N. Y.

This small, inexpensive office machine is Photostat Corporation's answer to the great and increasing need for dependable, easily-operated, money-saving photographic office copying.

It will make three or more black-on-white copies up to 8½ x 14 in one minute ready for immediate use on plain paper from one photo-sensitive matrix.

It takes up less than two square feet of floor space on desk or table . . . can be used under normal lighting

at any time by anyone in the office.

It will copy anything typed, printed, written or drawn and is fully guaranteed by Photostat Corporation.

Our trained sales-service representatives give instruction in its proper operation. They can be your friendly advisors on how to meet your copying problems with real savings in time and money.

Write us . . . your inquiry will receive our prompt and interested attention.

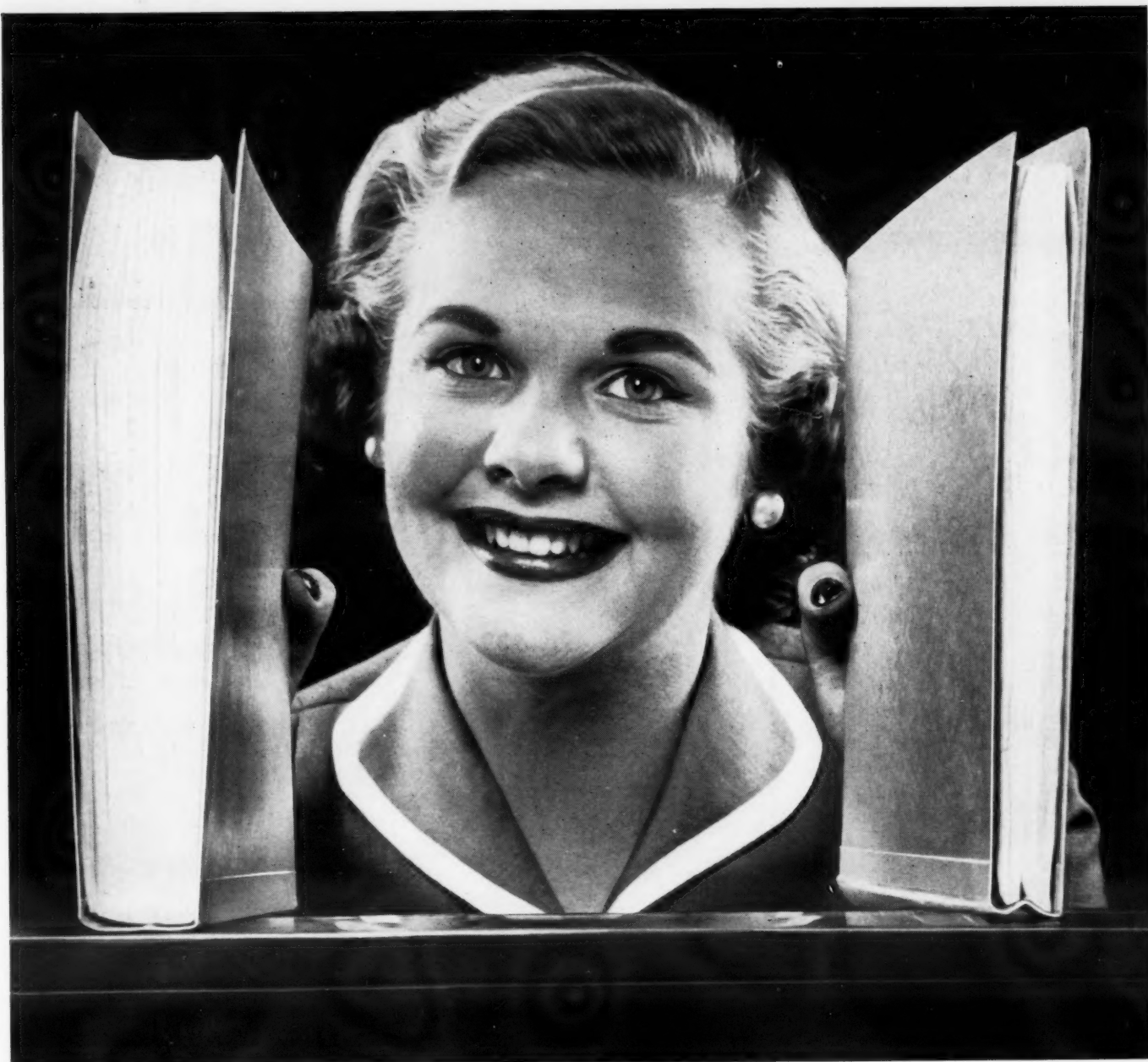
PHOTOSTAT is the trade-mark
of PHOTOSTAT CORPORATION

PHOTOSTAT CORPORATION

301 STATE STREET, ROCHESTER 14, NEW YORK

Service offices in most principal cities
and in Toronto, Canada

(Circle 298 for more information)



Both folders contain 200 photocopies!

But look at the difference in the amount of filing space they take up! That's 200 sheets of super-thin Du Pont "Photo-Writ" W on the right — less than $\frac{3}{4}$ of an inch thick. Same amount of conventional photocopy paper at left is almost 3 times as thick! There's the proof — photocopies on "Photo-Writ" W can cut your filing space by more than half.

Get more information on space-saving "Photo-Writ" W. Mail the coupon below for the free booklet "Du Pont Photographic Reproduction Papers." It contains "how-to-do-it" data on all the Du Pont photocopy products. E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware. In Canada: Du Pont Company of Canada Limited, Montreal.

DU PONT "PHOTO-WRIT" W



REG. U. S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

(Circle 269 for more information)

E. I. du Pont de Nemours & Co. (Inc.)
Room 2498 Nemours Building
Wilmington 98, Delaware

- ☐ Please send me the free Du Pont booklet
"Du Pont Photographic Reproduction Papers"
- ☐ Please have your technical representative call.

Name _____

Firm _____

Street _____

City _____

State _____

173

3

Do workers do better with a

INDIVIDUALS, AS WELL as groups, make more effort to succeed if they see they are achieving something in the direction in which they are headed. This principle has been extensively applied by consultants of the National Institute of Industrial Psychology in the spectacular output gains they have brought about in British factories and offices. The chart summarizes the case of some girls who were preparing fruit in a marmalade factory. (6)

Their output fell under the original scheme, when a day's full work was piled in front of each girl at the start of the day. This huge backlog made the job seem like an endless activity that got nowhere slowly. Then one change was made. The girls were given a small tray of fruit to work on at a time. This seemingly slight change almost doubled output!

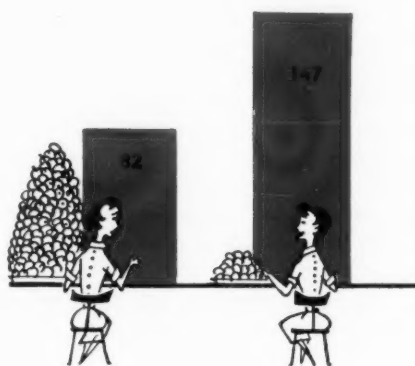
A stop-watch study might have indicated that the new method would waste time, as one tray was changed for another. There would also be avoidable steps in removing and bringing trays. But the results in output, which have been demonstrated many times, bring home the point that people, unlike machines, are goal-motivated. Each small tray presented a goal. During the work spell, each tray gave a close-range goal, or *achievement point*. When one tray was completed, a sub-goal had been reached, and there was the stimulating feeling of getting ahead on the job. The completed trays provided the workers with *achievement points* by which they could note their progress. What had been a daily grind, became more of a pursuit of *achievement points*.

Goal-motivated behavior is featured by spurts, when extra steam is turned on: 1.

methods

big backlog?

UNITS PER DAY PRODUCED



There is an *initial spurt* each time a fresh batch is tackled. 2. A *make-up-for-lost-time spurt* after an interruption, or when one becomes aware of a slump. 3. A *finish-line spurt* when the goal comes in sight. (8, Chapters 2, 8)

Work quotas are a familiar example of goals. Sometimes these quotas are set in an arbitrary fashion, without the work group participating. The quota may be set unreasonably high, on the assumption that it will serve as an incentive to work harder. But when workers sense that their supervisors are making unreasonable demands, it has been found that the workers lower production. More blue-collar than white-collar bosses are seen as unreasonable by their workers. (7)

With assembly-line operations it is usually difficult to supply sub-goals or "achievement points" to encourage the workers in reaching their goals. (9)

A revolutionary new

HIGH FIDELITY

Dictation-Transcription Machine

by COMPTOMETER

Pays for itself!

Comptometer announces a revolutionary new dictation machine that pays-for-itself as you enjoy years of the finest high fidelity, magnetic dictation. Now dictation becomes as easy and natural as talking to your secretary. The amazing lifetime guaranteed magnetic Erase-O-Matic belt can be used thousands of times over again. No expensive discs, cylinders or records to continually buy, ever. The letters you dictate are so error-free...so easy to understand, because of the high fidelity voice reproduction, it makes *any* typist a secretary. Here truly, is America's finest machine with savings that now bring dictation within the means of every business. Mail coupon for complete information on this compact electronic achievement by Comptometer.

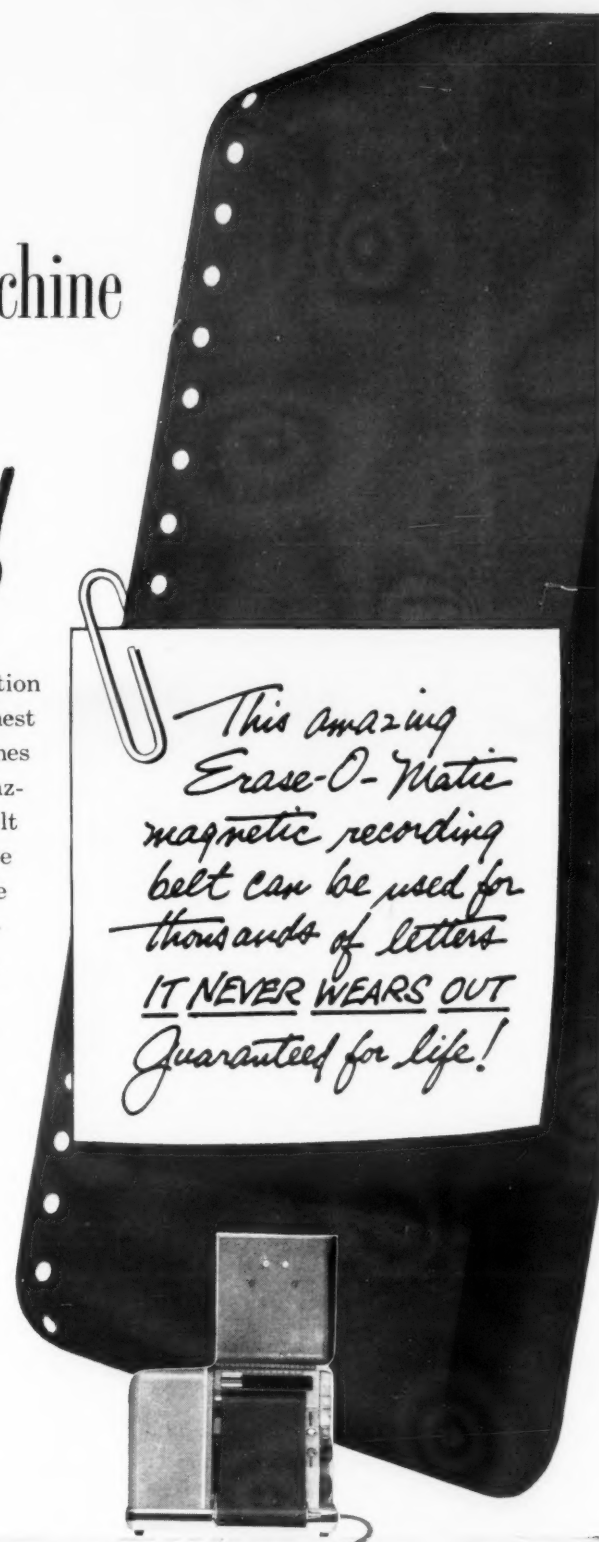


Another quality product by Felt and Tarrant, Mfg. Co., makers of World Famous Comptometer, Adding-Calculating machines since 1886.

Outstanding Features...

- ERROR FREE DICTATION
- HIGH FIDELITY RECORDING
- DUAL SPEAKERS
- PORTABLE
- SMALL—COMPACT

with matchless SIMPLICITY of operation



This amazing Erase-O-Matic magnetic recording belt can be used for thousands of letters IT NEVER WEARS OUT Guaranteed for life!

Comptometer DICTATION—TRANSCRIPTION MACHINE

COMPTOMETER Dictation Division
Felt & Tarrant Mfg. Co., 1712 N. Marshfield St., Chicago 22, Ill.

Gentlemen: We are interested in the Comptometer Office Dictation-Transcription Machine with the Lifetime Guaranteed Erase-O-Matic Recording Belt. Without cost or obligation:

☐ Please send Complete Information ☐ Arrange for a Demonstration ☐ Arrange for a Free Office Trial

Name _____ Title _____

Company _____

Address _____

City _____ County _____ State _____

(Circle 272 for more information)

STATE FARM



INSURANCE



"National Accounting Machines save us \$96,000 a year... return 89% annually on our investment!"

—STATE FARM INSURANCE COMPANIES,* Bloomington, Illinois
"First in Automobile Insurance"

"A constant search for the most efficient accounting procedures is an important part of our business.

"To obtain this efficiency, we invested \$109,000 in National Accounting Machines. They have returned amazing dividends. Nationals now save us \$96,000 every year—a return of 89% annually on our investment.

"Careful attention to such administrative details and operating costs helps us assure safe, low cost insurance and maintain our position of 'insuring more automobiles than any company in the world.'"

Edlai H. Rush

President

State Farm Mutual Automobile Insurance Company

JOBS HANDLED:

Writing all disbursements
Returned check reports
Reporting premium renewals
Bank deposits
Agents earnings records
Liability reports
Reports of financed agents
Social Security reports

*State Farm Mutual Automobile Insurance Co. • State Farm Life Insurance Company • State Farm Fire and Casualty Company

In your business, too, National machines will pay for themselves with the money they save, then continue savings as annual profit. Your nearby National man will gladly show how much you can save — and why your operators will be happier.

TRADE MARK REG. U. S. PAT. OFF.

National

ACCOUNTING MACHINES

ADDING MACHINES • CASH REGISTERS

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO
949 OFFICES IN 94 COUNTRIES

(Circle 291 for more information)

4

How important is variety

IN THE SURVEY charted, clerks in the home office of a very large firm were divided into two classes. One class was on jobs that gave them a little variety during the day. The other class was on jobs where one hour was just like the next; all sameness and no variety, except possibly to go to the drinking fountain.

The survey showed that five times as many who were on the jobs offering variety, had high satisfaction from their work. The variety in these cases was not actually much, not nearly as much as with the one-girl office. But the little leeway that was there, produced desirable results on morale. (10)

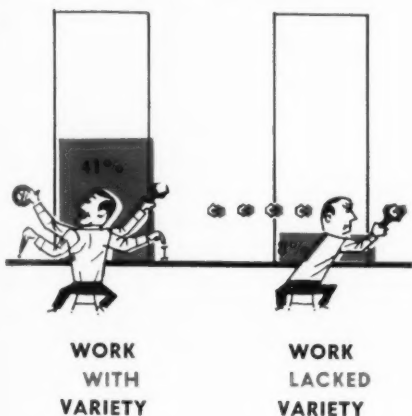
How many workers on standardized office routines are dissatisfied because their jobs lack variety? In this firm it was 23%. Another 27% felt their jobs gave them variety. The remaining 50% did not make any mention of it.

Assembly line work is usually low in variety. In a modern automobile plant, $\frac{1}{3}$ of the assembly line workers did only one operation. Another $\frac{1}{3}$ did two to five operations, such as: put four screws on a baffle, then insert nine clips—a two operation job. The remaining $\frac{1}{3}$ had jobs with five or more operations. The fewer the operations, the more men who reported the work as uninteresting. There was also more absenteeism among those men who were on jobs which had the extreme features of mass production. (9)

Some people doing a job think it gives variety, while another person at the same work thinks it lacks variety. As a rule, the less capable worker can be expected to think that a simple job provides variety. The less capable worker probably has lower goals, and the routine job reaches a goal for him, while it would not for a skilled machinist. This is one of the

in a job?

JOB SATISFACTION



things the boss needs to consider in assigning workers to jobs.

The style of boss is also a factor in whether or not a job seems to have variety. When workers are allowed to move around, talk at work, take coffee breaks, a job seems to have more variety than it might otherwise. But when a boss supervises closely, a job with actually varied tasks may seem as though it were getting nowhere. Bosses who supervise closely have been found to get less output on routine jobs. But on non-routine jobs, workers appear to accept closer supervision as a "higher" function of the leader. (11)

A little more variety can often be added to jobs that have been over-simplified. Girls assembling radios, for example, had been soldering only six connections. Increasing the number of joints each girl soldered upgraded the job because it added a little variety. (6) Work becomes more meaningful, and more goal-directed when a job has variety, but not so much that it overtaxes the individual's abilities.

HOW MAJOR AMERICAN FIRMS IDENTIFY AND SOLVE THEIR OPERATING PROBLEMS

WORKSHOP FOR MANAGEMENT

A collaborative publishing achievement of

MANAGEMENT METHODS MAGAZINE
SYSTEMS AND PROCEDURES
ASSOCIATION OF AMERICA

Most business books today are written for "technicians." The management man gets lost in jargon after the first few pages.

That's where **WORKSHOP FOR MANAGEMENT** differs:

- 1) This book wasn't "written" at all—it's a word-for-word transcription of one of the most complete management conferences and workshops ever conducted.
- 2) It is slanted specifically for management, using non-technical language, and reporting in terms of end results.

With this in mind, glance at the partial Table of Contents and you'll see why we are willing to offer it to you on a firm, money-back guarantee basis.

A practical symposium on electronics

In addition to covering all major areas for improving management methods, special emphasis on Electronics for the Office is featured in both the general conference addresses and panels,

516 pages

300 illustrations

\$19.00

How should "Workshop" be used?

You won't want to read it from cover-to-cover at one sitting—or even a dozen. You will want to glance through the Table of Contents immediately for quick help on problems that concern you right now. Since most internal operating problems overlap in many fields, you will also want to refer to the detailed index that coordinates all information in the 516 pages.

What about the subject matter?

Consult the Table of Contents. Each of these subjects is covered by a practical businessman, or by several men, each personally concerned with how to simplify and reduce the cost of running a business. Each has avoided "theory" and devoted himself to proved-in-practice solutions.

Isn't this just another "book of proceedings"?

No! Unlike most conferences, there were very few "speeches." The purpose of this meeting was to exchange practical ideas. Careful editing has removed all purely local asides and repetitions. What remains is a solid, fact-full presentation superbly organized and illustrated!

How was it possible to cover so many subjects in a three-day conference?

Each attendee had his choice of three sessions he could attend. These sessions ran simultaneously, in different rooms. Obviously, a man could not be in more than one place at one time. But you—with this volume in your hands—can cover the whole conference.

WORKSHOP FOR MANAGEMENT

as well as in the Seminars. The Seminars, in particular, are designed for the so-called "beginners," as well as for the partially-informed executives.

This information is of special value at this time. Electronics manufacturers have made tremendous strides in the last twelve months in developing practical office applications. The only thing that stands in the way of another development spurt is the time it takes potential users to educate themselves as to how now-perfected equipment can be applied to their operations. Under normal conditions, a company can expect at least a twelve-month lag between a decision to "get the facts" and actual ability to evaluate whether or not electronics applications are feasible for them. This publishing achievement can materially reduce this time lag.

PARTIAL CONTENTS

I. ELECTRONICS SECTION

150 pages of practical information on electronics development, personnel problems, equipment and applications—Orientation in Electronics, Initiating an Electronics Program, Preparing for the Automatic Office, Accounting Machine Developments, etc.

II. GENERAL MANAGEMENT

A. Operations Research
Techniques
Products
Problems
B. Incentive Plans
Executive
Clerical
Shop
Sales
Supervisory
C. Methods and Procedures
Organization
Responsibility
Function

D. Office Layout
Department Locations
Modular Planning
Space Control

III. TECHNIQUES & APPLICATIONS

A. Clerical Control
Cost
Simplification
Measurement
Analysis
Personnel Utilization
B. Paperwork Control
Forms Design
Origination
Standardization
Costs
Management
Records
C. Quality Control
Statistical Sampling
D. Communications
Remote Data Transmission
Facsimile Devices
Industrial T. V.

10-day Free Examination Privilege

Use coupon below or order card bound in this issue

Management Magazines, Inc., Suite 101M
141 East 44th Street, New York 17, N. Y.

Please send me for 10 days FREE EXAMINATION a copy of "Workshop for Management." Within 10 days I will either send payment for \$19, or return the book without obligation.

NAME

ADDRESS

CITYZONESTATE

"I gain 2 hours a day"...so can you!



When Joe was home or on the road, he'd work till late at night • To write out all his letters, orders, memos—what a fight it was, till Hal, his lawyer friend, said, "Try instant dictation • With Dictaphone TIME-MASTER*—best machine in all the nation.



"Pick up a mike and think aloud." Joe did—and bought TIME-MASTER • Now he uses it everywhere—works better, easier, faster • And once work's said, he knows it's *right*, 'cause typists can't mistake his words on Dictabelt, the plastic record that can't break.



He mails the belts just like a letter. They're feather-light and clear • The office listens to reports without phone tolls to fear • Dictaphone TIME-MASTER saves so much in work and dough • The boss equipped all of his staff to communicate like Joe.



So that's how Joe gets more work done—and gains two hours a day • Plus money, too. And so will you. We'll prove that it will pay for *you* to use TIME-MASTER in most any job you fill • Take a free desk trial—and start to make the most of *all* your skill.

*The complete name is the Dictaphone TIME-MASTER Dictating Machine.

DICTAPHONE...FIRST IN SALES AND SERVICE OF DICTATING MACHINES THE WORLD AROUND



Try the Dictaphone TIME-MASTER Dictating Machine on *your* job. Just call or write your local Dictaphone sales and service representative. Or write Dictaphone, Dept. ME-35, 420 Lexington Avenue, New York 17, N. Y.

The plastic Dictabelt record—unbreakable, mailable, filable and exclusively Dictaphone's.

DICTAPHONE TIME-MASTER DICTATING MACHINE

DICTAPHONE, TIME-MASTER AND DICTABELT ARE REGISTERED TRADE-MARKS OF DICTAPHONE CORPORATION
(Circle 268 for more information)

5 What happens when the job seems important

A GOAL WHICH nearly all work groups and individual workers want to reach is to move upward by improving their job status. They are lured by the thought of winning a little more prestige. They keenly want favorable recognition not only from fellow workers, but also from the community at large. The leader who has good empathy can do many "higher" things which help his followers make headway toward this goal. (8, chapters 12, 13)

One way is to keep workers centered on the *importance* of the job they are doing. This was demonstrated in experiments for the Office of Naval Research, with people making artistic patterns with bricks.

Each of the 99 people did exactly the same work. But they were led to believe there was a difference in the status of their jobs. Some were told, "You have the best and most important job in the group." The remainder were told that the best jobs had been given to the others. (12)

Workers, who got the impression that their jobs were low class, expressed discontent about their work *three times as often* as the others during the first half-hour. Those who thought they had the low class jobs also talked more about topics that were not related to the work. This is an example of trying to avoid thinking about topics that give one anxiety.

Those on the so-called low class jobs were also more confused about how to do the work, although they turned out the same quality of work as the others. Apparently the job *seemed* harder because of the anxiety over their status. Hostility may also have been at work to help cause this confusion. There was another significant tendency in their interactions—the people on the low status jobs talked more to the people on the so-called high class jobs. Talking with the higher status workers apparently added a bit of lustre to the imagined low status work. Research for the National Institute of Mental Health, and another for the Office of Naval Research, have shown that people are inclined to talk more to those whom they think have higher prestige, probably for their own prestige feelings. (13, 14; and 15).

It was also found that grapevine rumors in one office were spread to the person

methods

above by 65% of the people, but to those below them by only 12%. Another example of striving for prestige as a mental and social force in work life. (16)

The boss who teaches his workers new job details is also upgrading the workers' feelings of status. Among railroad laborers, the bosses who trained their men for new duties had higher productivity. (15, 17)

In the work discussed previously, about 1/3 of the artistic bricklayers were women. Ideas about job status had about the same effect on them as on the men. m/m

BIBLIOGRAPHY

(1) Maccoby, N. "The relationship of supervisory behavior and attitudes to group productivity in two widely-different industrial settings." Ann Arbor: Institute for Social Research, 1949. Publication J7-2.

(2) Berkowitz, L. "Sharing leadership in small, decision-making groups," Journal of Abnormal & Social Psychology, 1953, Vol. 48, pp. 231-238.

(3) Hemphill, J. K. "Situational factors in leadership." Columbus: Ohio State University. Personnel Research Board, Leadership Studies, No. 4, pp. 136.

(4) Pelz, D. C. "Influence: a key to effective leadership in the first-line supervisor," Personnel, Nov. 1952, pp. 3-10.

(5) Harvey, O. J. "An experimental approach to the study of status relations in informal groups," American Sociological Review, 1953, Vol. 18, pp. 357-367.

(6) Welch, H. J. & Miles, G. H. "Industrial psychology in practice." New York: Isaac Pitman & Sons, 1932.

(7) Katz, D. & Kahn, R. L. "Some recent findings in human relations research." Ann Arbor: Survey Research Center, 1952. Publication JJ-11.

(8) Laird, D. A. & E. C. "Practical Business Psychology," New York: Gregg Publishing Division.

(9) Walker, C. R. & Guest, R. H. "The man on the assembly line." Cambridge: Harvard University Press, 1952.

(10) Morse, N. C. "Satisfactions in the white-collar job." Ann Arbor: University of Michigan Press, 1953.

(11) Katz, D., et al. "Productivity, supervision and morale in an office situation." Ann Arbor: University of Michigan Press, 1950.

(12) Kelley, H. H. "Communication in experimentally created hierarchies," Human Relations, 1951, Vol. 4, pp. 39-56.

(13) Hurwitz, J. I., et al. "Some effects of power on the relations among group members." Chapter 32 in Cartwright, D. & Zander, A., "Group Dynamics." Evanston: Row, Peterson & Co., 1953.

(14) Thibaut, J. "An experimental study of the cohesiveness of underprivileged groups," Human Relations, 1950, Vol. 3, pp. 251-278.

(15) Blau, P. M. "Interactions in a government agency," Human Relations, 1954, Vol. 7, pp.

(16) Back, K., et al. "The methodology of studying rumor transmission," Human Relations, 1950, Vol. 3, pp. 307-312.

(17) Katz, D., et al. "Productivity, supervision and morale among railroad workers." Ann Arbor: University of Michigan Press, 1951.

"Why did it cost \$2⁷⁶ to put on a dime's worth of paint?"



Talk fast, mister! . . . Don't worry, the foreman will—with plenty of explanations. But afterward he'll take steps to cut painting costs back to where they should be. And keep 'em there.

Who's the hero of this drama? Keysort punched-card accounting. The boss learned through Keysort operation costing that things were getting out of hand in the Finishing Department. On certain operations the figures were far higher than last week's. Knowing the score—and knowing it *on time*—the boss could move quickly

to bring his cost picture back into focus.

Moral: a McBee Keysort installation can give you comprehensive, accurate reports on every phase of factory operation, and give them to you *fast*. On your desk by the 4th of each month. Important interim figures weekly, or even daily. Whether yours is a 100-man payroll or a colossus supplying the whole country. The cost? Surprisingly low.

There's a trained McBee representative near you. He'll be glad to show you how it's done. Or write us.

McBEE



KEYSORT®

Punched-card accounting for any business

Manufactured exclusively by The McBee Company, Athens, Ohio • Division of Royal McBee Corporation
Offices in principal cities • In Canada: The McBee Company, Ltd., 179 Bartley Drive, Toronto 16, Ontario
(Circle 286 for more information)



PUSHBUTTON DICTATION

...lets you work
as fast as you think!

Modern, low-cost PhonAudograph makes dictation as easy as that! You handle no complex machinery — you have nothing to learn or practice! A familiar telephone handset is your "microphone" — your words are recorded right at your secretary's desk. You dictate at your convenience; she has more time to relieve you of administrative detail. For a free demonstration call your Audograph dealer today — or write us for your copy of "The Miracle of Pushbutton Dictation."

GRAY PHONAUDOGRAPH

Mail coupon
today!

The Gray Manufacturing Company
Hartford 1, Conn.
Send Free Booklet J-3
"The Miracle of Pushbutton Dictation"

Name.....
Firm.....
Street.....
City.....State.....

(Circle 278 for more information)

How to distribute



pay checks

Important values have long been claimed for the practice of having foremen distribute the pay checks in their departments. According to a survey by the Associated Industries of Cleveland (AIC), this practice is generally followed by their members.

Industrial psychologists are inclined to feel that the *actual moment* the foreman hands the factory employee his check is a very important moment to management. In those few seconds, the elements of recognition and reward, self-respect, pride, and the feeling of belonging are involved. It is a basic expression of the partnership of management and labor.

Many managements have been aware of these things for a long time, and are capitalizing on it. But for others, particularly the large corporation, pay check distribution by foremen is not always feasible.

Here are some of the typical methods of pay check distribution, according to the AIC survey:

Checks go from payroll department to foremen, who distribute them personally.

Paymaster distributes them to each workman personally.

Payroll department distributes them to various timekeepers, who, from a long table in the cafeteria, distribute them to workmen just before lunch time, according to the clock number on badges.

Employees go to payroll department to receive checks.

Bank service brings cash in envelope for each employee to employee's work station, and employee submits stub from his time card in return for his pay envelope.

Payroll department mails them to the employees' homes.

Payroll department gives them to department head, who gives them to supervisors, and they distribute them to employees on their jobs.



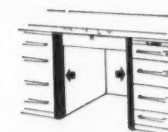
by
Imperial



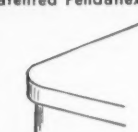
Adjustable glides permit greater working comfort—equalize any unevenness in floor (between 29" and 30 1/2").



Ball-bearing suspensions on file drawer give finger-touch control. Conference and Executive Desks feature patented Penda-flex file.



"Densiwood" posts at knee well space eliminate possibility of marking or scuffing.



Graceful round-corner design gives greater working space in less area.

THE METROPOLITAN GROUP—in the matchless warmth and beauty of fine cabinet woods. Smartly styled for maximum efficiency. See your IMPERIAL Dealer or write now for details.

IMPERIAL DESK COMPANY
Evansville 7, Indiana

(Circle 281 for more information)

methods

methods

asks the

experts

THIS MONTH'S EXPERT



Gustave Simons

Executive Vice President
Creative Age Corporation
New York, New York

Mr. Simons is an attorney (member of the New York Bar), and economist, who has specialized for many years in the capital formation problems found in the modern corporation.

He believes that there are many advantages in the tax law, generally unrecognized, which can be utilized in developing incentives that will increase employee productivity. His ideas and findings are outlined in the eight case histories reported in this article.

Tax dollars CAN FINANCE AN Employee Trust

During recent years, changes in the Tax Law—and revisionary Tax Court rulings—have upset many a well-laid plan for effecting a tax saving. These reversals are seldom as sudden as they seem. In most cases, they follow underlying changes in tax philosophy that could be predicted by the tax-informed businessman. These trends also work in reverse, favoring the taxpayer. One such trend toward tax exemption is apparent in the government's continuing benign attitude toward Employee-Community Trusts.

The employee foundation is a non-stock, non-profit corporation. In general, they are designed to provide valuable employee incentive devices. Frequently, they do a job where pension or profit-sharing trusts provide insuperable obstacles. They are also valuable supplements to pension and profit sharing trusts.

Rather than deal in generalities, I shall detail eight fairly typical examples of Employee-Community Trusts, together with outlines of how they were financed through tax economies.

EXAMPLE 1

The machine tool industry is a business of technicians at both the employee and executive level. It is essential to the safety of the nation that groups of skilled technicians be held together through both feast and famine. One machine tool company has provided an Employee-Community Trust which can provide layoff or termination benefits for its employees or executives. Their Trust can be employed to maintain valuable personnel on a stand-by basis, who might otherwise be disbanded during a temporary economic emergency. This would be a permanent loss to both the company and the personnel, and to the nation, as well. Further, their Trust can provide for death, disability, and other personal emergencies.

A very favored procedure was used in financing this Employee-Community Trust. The annual costs of the Trust were met by donating machine tool manufacturing equipment that had a high fair market price and a low book value. The corporation received a tax deduction equivalent to the fair market value, and then leased the equipment back, deducting the rent as a business expense. The total tax benefits offset the cost of the donation.

The Trust is managed by the directors of the company. It does, on the basis of individual initiative, what the government would otherwise have to do upon a collective basis. The government has nothing to do with the Trust except to provide the tax incentives which make the Trust financially feasible, and to make certain that the Trust is used for its stated purposes.

EXAMPLE 2

An electronics company found that the maintenance of its competitive position and the continuing expansion of its operations depended upon the assembling of a group of highly-skilled scientists with the constant addition of the topmost skills available. It set up an Employee-Community Trust, financed chiefly through tax economies, which took employees already on its payroll and provided advanced education in their special skills for them. The Trust also sent executives on field research tours throughout the country and abroad, thereby expanding their vision and their skills. Specially-gifted children of employees and executives were given scholarships for college education. Scholarship campaigns were carried on throughout the country for young scientists who were carried through college and professional schools by the Trust.

The company financed their Trust by donating several patents, receiving their tax deduction for the fair market

value of the patents, and leasing them back from the Trust. The lease then was taken as a business expense.

EXAMPLE 3

A food company desired to expand its market. A special tax-exempted Employee-Community Trust was set up which carried on prize campaigns throughout the country, providing special advanced training for women who offered the best recipes in the field in which the food company was active. This not only generated enormous amounts of good will in the market in which the company operated, but also unfolded many new uses for its products. The dynamics of the company's operation was thus expanded, and many new jobs were created.

The most common form of financing, a cash contribution, which is deductible, was used in order to provide the necessary funds.

EXAMPLE 4

An engineering corporation, which manufactured highly technical products for war use, found itself with high earnings subject to heavy taxes. It was also faced with the prospect of a very substantial cutback of activity and reduction of employment on contraction of war orders. It desperately needed a new line of peacetime products.

Entirely with funds which would otherwise have been subject to practically confiscatory taxation, a research job fund (another type of Employee-Community Trust) was set up. Due to the tremendous tax burden the engineering corporation very smartly used a tax deductible cash contribution.

New products were developed, and products developed abroad were discovered and brought into the country. The company has built up a fine, solid, peacetime business, providing the means not only for maintaining the jobs already at hand, but also for mak-

In Record-Keeping Papers What Matters Most is COST OF USING . . . Not Original Cost



LEDGER paper and index cards use space and housing that cost money. So you want them as thin and light as they can be and still wear well enough and last long enough. When you need a stronger, longer-lasting paper, buy a *better quality* rather than a heavier weight. Doing this usually costs no more, and will save space.

Quality in record-keeping papers means paper made with cotton fiber. Cotton fibers are tough and resilient. Parsons makes ledger papers in 100%, 75%, 50% and 25% cotton fiber. Parsons index-card stocks are made in 100%, 50% and 25% cotton fiber.

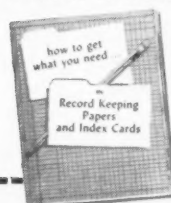
Parsons cards and sheets are solid — not pasted together. They won't split or dog-ear at the corners. Entries won't smudge or run on the fibers. Erasing by scratcher, rubber or chemicals leaves a smooth surface the same color. Parsons no-glare surface makes it easier to work on. Papers and cards

are available in many *matching* colors for "color control" of different types of records. Both papers and cards are available in numerous weights and sizes.

All these factors mean that your clerical costs will be lower when you use Parsons ledger papers and index cards. And you know that the cost of the paper your people work with is infinitesimal compared with the cost of getting the work done.

Free, Useful Booklet

There are nine basic principles essential in the economical operation of a records system. They are fully discussed in our booklet "How to Get What You Need in Record-Keeping Papers and Index Cards." Obviously, the first problem is to define what you need, and this booklet will help because it tells what grades of paper should be used for various types of records. Send for your free copy today.



Parsons Paper

COMPANY

More than 100 years at Holyoke, Massachusetts

© PPCO 1955

PARSONS PAPER COMPANY, DEPT. 32, HOLYOKE, MASSACHUSETTS
Please mail me, without cost or obligation, your booklet "How to Get What You Need in Record-Keeping Papers and Index Cards."

Name _____ (PLEASE PRINT)

Organization _____
or Company _____

Street _____

City _____

or Town _____ State _____

(Circle 236 for more information)

ing many new jobs, through continuing research.

EXAMPLE 5

A container manufacturer with many plants in small towns was faced with the problem of poor community relations. Business activity was very irregular. These communities found that men and women left jobs in which they had been employed for many years, and went to work in the container plant at better wages. But then they were laid off, with the result that the average economic picture in the towns suffered badly. Furthermore, established cultural patterns in the towns were changed. Strangers crowded into the towns, causing housing shortages, and the morale of the community, of the workers, and of the plants themselves, suffered badly.

Financed primarily with tax economy, Employee-Community Trusts were set up in each of these communities. The container manufacturer had a number of warehouses that had a low book value, but a high fair market price. They donated these to their Employee-Community Trust, and leased them back from the Trust. This was supplemented by cash contributions. The corporation received deductions from the donations, the rent on the warehouses, and also received the cash contributions.

These Trusts were not intended to make jobs directly, but were intended to maintain jobs and to improve the morale with which the existing jobs were so filled. The Trust contributed to the solution of the housing dilemmas in which the communities found themselves, and provided cultural and recreational activities which fit in with the operations of the plant, and with the community as a whole. Furthermore, the reserve fund of the Trust provided standby money which carried on useful activity at reasonable pay during the slack seasons.

We are all familiar with the WPA funds of the thirties, which attempted to solve unemployment through public works. This fund operated in the same way, except that it had the enormous advantage of being locally managed by the plant managers, with the assistance of the citizens of the community.

The government felt that it would be better for the company and the community to get together and do the job jointly, without government intervention, and to do it in a preventive fashion. The government permitted the reservation of the necessary funds from what otherwise would have been tax payments. This quote from the Internal Revenue Bulletin of July 20, 1953 is an example of the support for these programs that is given by the United States Government:

"The maintenance of the good will of a community, in which a business enterprise has its establishment, is of prime importance to the enterprise because of the effect on its progress and on its income. Moreover, since the community is generally the source of labor supply, a vital consideration is the morale of the employees in their own community. These and like considerations lead to the conclusion that amounts expended by way of rehabilitation of employees for injuries and damages sustained in a major disaster have a direct bearing on the retention of the employer's good will and the morale of the employees, which, in turn, are essential to the successful conduct of the business. It is accordingly held that such amounts, expended or properly accrued, will be allowable as ordinary and necessary business expenses under section 23(a)(1)(A) of the Internal Revenue Code. See *Corning Glass Works v. Lucas*, 37 Fed. (2d) 798; *Sugarland Industries v. Commissioner*, 15 B.T.A. 1265, acquiescence, C.B. VIII-2, 50; and *Slaymaker Lock Co. v. Commissioner*, 18 T.C. 1001, acquiescence, I.R.B. 1953-14, 1."

EXAMPLE 6

A famous bank found that one of the most serious job hazards adversely affecting executive morale was the problem of the retired employee. This was particularly true in the case of retired executives whose financial needs could not be met through the ordinary form of social security and private pension plan. Worse than this, retired executives felt themselves thrown on the scrap heap. They kept returning to the company offices in a pitiful attempt to recreate a sense of usefulness. At first, the retired executive would be joyfully greeted by his former associates, but soon he became little more than a bad nuisance. The active executive, however, could not help thinking that in all too few years, he himself would be in this unhappy situa-

tion. Furthermore, management felt that this situation represented a shameful waste of valuable human assets. While these executives could not continue under the full pressure of commercial affairs, they, nevertheless, had great skills which were not ready to be cast aside.

In order to solve this all too common problem, the bank set up a retirement Employee Trust. Another method of financing was used by the bank through the contribution of appreciated securities. The bank received a deduction for the fair market value of the securities and were exempt from paying a capital gains tax. Tax economies made this much more feasible than the ordinary retirement program.

As executives approached retirement age, they would start working for the trust. Some of the executives did research work, others did educational work, and still others administrative work. Detailed studies of the capacities of the executives were made, and the best kind of work for them was developed. At age sixty, the executive went to work for the Trust one day a week, and continued at the bank four days a week. At sixty-two, he worked with the Trust two days a week, and continued at the bank three days a week. At sixty-five, he quit the bank and its heavy pressure, and devoted himself on a four-day-a-week basis to work for the Trust along the lines of his specialized skills.

Then, as he grew older, he gradually cut down on his Trust activity, be it research, education, or the like. *Unlike a pension fund, management was not governed by mathematical formulae.* The management of the Trust, which consisted of directors of the bank and special advisors, decided what executives and employees most needed the financial and emotional stimulus available through the Trust. Thus, variations in stipend paid by the Trust could be determined in each individual case within the discretion of the Trust managers, providing that the simplest principles of honesty and good faith were observed.

As a result of this program, the younger employees of the bank are given invaluable training in the course maintained by the Trust. Important



\$1,675 investment in Recordak Microfilming pays \$15,000 annual dividend. L. F. Rothschild & Co., N. Y. C., eliminates costly manual transcription in keeping stock records . . . saves on stationery, postage, etc.



Spends \$600 per year . . . saves \$5,000. Moledzky Transportation Company eliminates check sheets, transcription errors . . . has all records at finger tips.



Navy saves \$35,000 by taking ships' inventory with Recordak Microfilming. 1000 photographically accurate records made in an hour compared with 20 using manual transcription.

Recordak Microfilming makes possible Short Cuts that save millions

Regardless of your type of business—or its size—you should double check your routines with a Recordak Systems Man *soon*.

Doing so has paid off for thousands of companies in over 100 different types of business. And the chances are good some of the routines which have been streamlined by this sensational photographic process are *similar to yours*.

You certainly don't want to pass up savings which are many times greater than the low cost of Recordak Microfilming. Just tell us when you'd like a Recordak Systems Man to call—*no obligation whatsoever*.

Recordak Corporation (Subsidiary of Eastman Kodak Company), 444 Madison Avenue, New York 22, N. Y.

"Recordak" is a trade-mark

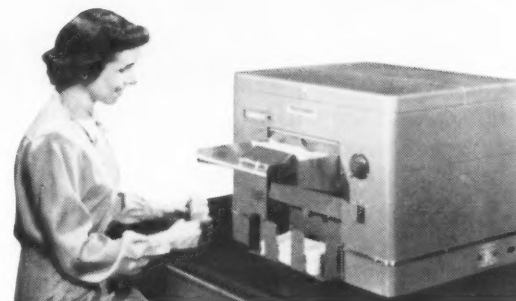
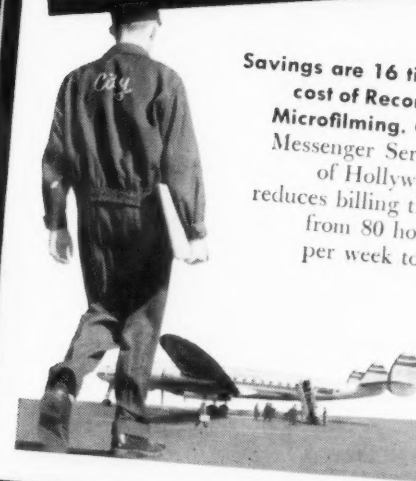
RECORDAK

(Subsidiary of Eastman Kodak Company)

**originator of modern microfilming—
and its application to business systems**

(Circle 270 for more information)

Savings are 16 times cost of Recordak Microfilming. City Messenger Service of Hollywood reduces billing time from 80 hours per week to 4.



Recordak Bantam Microfilmer—one of 6 models for all budgets—photographs over 500 3x5 inch cards or 200 letters per minute.

Stop unaccountable inventory shrinkage with **Cummins** controls

Everyone with an inventory has inventory shrinkage. Spoilage, obsolescence and scrap are some of the known causes. But everyone with an inventory also finds, at each audit, an additional shrinkage that is not accountable.

Unaccountable inventory shrinkage can be caused only two ways—by paying for something you don't get or shipping something you don't get paid for.

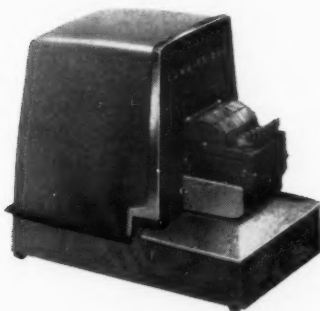
Cummins Controls plug both leaks.

Cummins Invoice Canceling prevents accidental double payments, reduces accounting costs and provides a mechanical control that saves the chief accounting executive considerable time that would otherwise be spent in routine surveillance. It also provides maximum safety from dis-

bursement fraud—the greatest single source of loss to American business.

Cummins Order Control insures proper billing of all shipments, prevents unauthorized withdrawals of merchandise, simplifies audits. With any other order system, the cost of a complete check out of all orders entered is so great that it is seldom carried out. Cummins Order Control gives you a check out with no extra effort, automatically, every day.

On the basis of a 10 percent profit on sales, every dollar saved in reducing inventory shrinkage is worth at least \$10 in new sales. For full information on these Cummins systems for controlling inventory shrinkage, mail coupon or consult your telephone directory for the name of your nearest Cummins representative.



Cummins Invoice Canceling Perforator cancels invoices, supporting papers with holes you can read, virtually eliminates accidental and intentional duplicate payment of invoices.



Cummins Order Control Perforator numbers order sets consecutively with holes you can read, gives absolute control over all business transactions, permits easy check outs.



Cummins
Business
Machines
sales and
service
offices in
principal cities.

IN BUSINESS AND BANKS SINCE 1887
Cummins

CUMMINS BUSINESS MACHINES

Division of Cummins-Chicago Corp.

Dept. MM-35, 4740 N. Ravenswood Ave., Chicago 40, Ill.

Please send me full information on Cummins

☐ Invoice Canceling ☐ Order Control

Name _____

Name of Business _____

Address of Business _____

City _____ State _____

(Circle 266 for more information)

economic research is carried on by the research members of the Trust, and the relations between the community and the banking world are constantly under study by other Trust members.

EXAMPLE 7

A large retail chain organization found that its earnings were slipping badly because of the poor job morale of its employees. A study disclosed that one additional successful sales transaction *each* morning and *each* afternoon would represent the marginal volume, which would increase their earnings by some 50%.

The company set up a tax-free Employee Trust managed by some of its directors. It then went to the employees and said, "When we have earned 8% of our capital, we will take a predetermined portion of any extra earnings and put them into this Employee Trust. With the Trust, we will buy stock of the company on the open market, and hold it for your benefit. Alternatively, we will buy newly-authorized stock of the company. When you leave the employ of the company after a period of years, retire, die, or are disabled or unemployed, you or your family will obtain the benefit of these shares, or the dividends they earn over a period of years, thus you are being provided with an incentive-security fund."

A ten-year analysis demonstrated that some \$14,000,000 of additional capital would thus be created for the benefit of the employees directly, and indirectly for the benefit of the corporation and its stockholders. Back of all this, *the government would benefit because of the increased level of business operations*, for it was found that the program acted as an incentive for that higher level of productivity which was essential for the growth of the company. Not only were jobs made and maintained, and job morale improved in all the stores of the company, but jobs were made on the part of the manufacturers throughout the country who supplied the company and its stores with the goods. In addition, the stock acquired through this Trust, instead of being in the hands of absentee-management, was managed by a group of trustees drawn from the board of directors of the company. (next page)

DO YOUR RECORDS NEED A "PERMANENT"?

Nothing is more vital to your business than your *permanent* records. If they're fading . . . getting "dog-eared" . . . then what your record-system needs is a "permanent"!

And how?

The Rising Paper Company has a kit you need—and it's **FREE** . . . yours for the asking! In it, you'll find the answers to making permanent records *permanent*! For your free kit . . .

Circle Number 305
on the Reader Service Card
for more information



Protect your inactive business records with proper storage. **LIBERTY STORAGE BOXES** are constructed of highest test corrugated fibre-board. Dust-proof, spill-proof protection. Liberty's storage system assures *fast-finding* of any record. Try **LIBERTY BOXES** for quality and low cost. 25 stock sizes. *Sold by leading stationers.*

Send today for **FREE** catalog picturing and describing economical record storage products for every business.

BANKERS BOX COMPANY

720 S. Dearborn Street • Chicago 5, Ill.

(Circle 255 for more information)

methods

EXAMPLE 8

A textile company desired to install a retirement plan for its mill hands. Actuarial studies indicated that the cost of respectable retirement benefits would be beyond the means of this company, because of the huge number of employees involved, particularly in the many years of low earnings that afflict this industry. As a solution for its problem, the company installed an Employee Trust to improve the morale and the work productivity of all of its employees.

The provisions of the Trust stipulated that the cost of labor as a proportion of value added to the raw materials by production would be measured by management engineers. Any subsequent reduction of this proportionate cost of labor would be shared three ways: one-third would go to the customers of the company in the form of reduction in prices; one-third to the stockholders as their reward for providing the equipment and capital; one-third to the employees' retirement fund. Provision was also made for cash distribution out of the job fund, where job conditions justified this at the discretion of the trustees, acting in this case with the guidance of an administrative committee.

The Trust was tax-exempt, with the result that the accumulation of retirement benefits was approximately twice as great as it would otherwise have been. Some of the funds were invested in the plant of the company, with the approval of the Commissioner of Internal Revenue. The plant was rented to the company with a base rental plus a percentage rental, depending on production. The employees thus had two incentives for productivity. First, as productivity increased and relative labor costs decreased, the benefits were earmarked on the basis described before, thus making possible a retirement plan where none had been deemed possible in the industry before. Secondly, since the income of the Trust and the level of benefits depended on the volume of production, at least in part, there was every incentive to step up production and to avoid work stoppages in the company.

(next page, please)



*It Takes a
Lot of "Copy Cats"*

**TO DO THE WORK
OF COPYFLEX!**



All-purpose, compact desk top Model 100 Copyflex. Produces up to 300 copies of different originals hourly, 11 inches wide by any length. **\$498⁵⁰**

You've got them in your company—valuable personnel who are forced by paperwork to become "copy cats." Every day, in one case after another, they manually copy the same original information from one departmental form to another. Their work is costly, slow, often inaccurate.

The new Copyflex Model 100 takes the place of "copy cats." Basic information is written only once—departmental copies are mechanically reproduced from the original "action" paper. Copyflex one-writing systems speed and simplify purchasing, production, shipping, invoicing, accounting, and a host of other operations. They free personnel for other important work, give you tighter control of operations, save thousands of dollars.

Copyflex machines are quiet, clean, odorless. They require only an electrical connection, can be operated by anyone. Mail coupon today!

Amazing New

BRUNING

Copies anything typed, written, printed, or drawn on ordinary translucent paper—in seconds.

Copyflex "100"

Specialists in Copying Since 1897

**Find how Copyflex can simplify
and speed the following paperwork:**

Purchase Requisitions	Payroll
Receiving Reports	Shipping Notices
Bills of Material	Invoices
Operation Sheets	Tax Returns
Production Orders	Sales Analysis
Accounting Reports	Inventory Controls

Charles Bruning Company, Inc., Dept. 904
4700 Montrose Ave., Chicago 41, Illinois
Please send me information on the Copyflex process
and new Model 100 machine.

Name _____ Title _____
Company _____
Address _____
City _____ County _____ State _____

CHARLES BRUNING COMPANY, INCORPORATED • 4700 MONTROSE AVENUE • CHICAGO 41, ILLINOIS

(Circle 256 for more information)

Remington Rand

BETTER BUSINESS METHODS

For Greater Profits
Through Lower Costs

ADD A FILING DRAWER...SAVE SPACE! With KOMPAKT

"extra drawer" File Cabinets



This new Remington Rand Kompakt File gives you an *extra drawer* of filing in every cabinet *without adding to its overall height*. The 3-drawer letter or legal size Kompakt File is desk height. The 4-drawer fits under your counter. The 5-drawer is the height of your regular 4-drawer file. But the new Kompakt gives you 6-drawers in the same height as the average 5-drawer cabinet!

Every bit of space unused in an ordinary file cabinet has been carefully utilized to bring you this space-saving "File with the Extra Drawer"

Recessed drawer pulls, offset label holders, smoothly rounded corners and handsome Gray-Rite finish, let the NEW Remington Rand KOMPAKT file add beauty while saving valuable space!

Send for booklet LBV692, illustrated with floor diagrams and figures to show how KOMPAKT Files save you money.

Volume Up 135%...Inventory Up 66% Total Inventory Personnel... Unchanged!

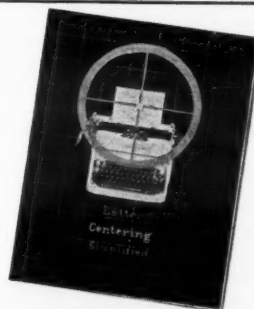
ONLY three girls maintain accurate inventory control over 10,000 fast moving items located in three widely separated warehouses of Will Ross Inc., of Milwaukee, Wisconsin.

By installing three, 4,000-card capacity, *mechanized* Robot-Kardex units, the management of this fast growing company solved several major problems:

They eliminated the time-consum-

ing searching through banks of manually-filed records; solved a serious personnel turnover problem; avoided departmental growth and provided for future expansion.

Additional money-saving advantages are in store for you with Robot-Kardex. Circle CH947 and KD505 Rev. 1. Learn more about handling increased volume without adding personnel!



LETTER CENTERING SIMPLIFIED

Center your letters perfectly...without moving the carriage...before you insert the paper! Learn how our exclusive Perfect Positioning Scale can save typing time. It's FREE circle R8667.

Remington Rand

Room 1334, 315 Fourth Ave., New York 10

Please send free literature circled below.

CH947 KD505 Rev. 1 LBV692 R8667

Name _____

Title _____

Firm _____

Address _____

City _____ Zone _____ State _____ OM-8

The result of this program has been that price reductions have increased volume, labor cost reductions have improved profit, retirement benefits have been provided, and what had been faced for many years as a potentially heavy drain on the assets of the corporation, turned out to be a source of increased earnings and improvement in industry position. m/m

"worth

Flexible pension plans: "The central object of a private pension program—and probably the only real justification for having one—is to encourage and facilitate the retirement of employees when and as it is in the best interests of the business that they be retired. The object of Social Security, on the other hand, is not so much to encourage or facilitate retirement, as to provide a subsistence level of income for all superannuated workers. Thus a private program must bridge the gap between the two objectives, producing a combined result which will permit the private plan to serve its purpose effectively, but without extravagance.

"The acid test of any proposed solution to this basic problem is whether it involves the optimum utilization of the Federal benefits as an integral part of an over-all program which will best accomplish the employer's retirement objectives.

"Ever since 1942 we have had specific limitations governing the extent to which a private plan pension formula may be loaded in favor of the higher paid people, in view of the fact that Social Security benefits are definitely geared to the needs of the lower-paid. An attempt was made in drafting the 1954 Revenue Act to get rid of these integration rules, which have become quite technical, but the attempt was unsuccessful and it looks as though the principle of integration limits is going to be a part of the tax structure affecting pension programs at least for a while yet. It is simply one more problem superimposed upon all of the others to make the whole question of relating the private pension programs to Social Security a complicated and difficult one."

John K. Dyer, Jr., Vice Pres., Towers, Perrin, Forster & Crosby, Inc.

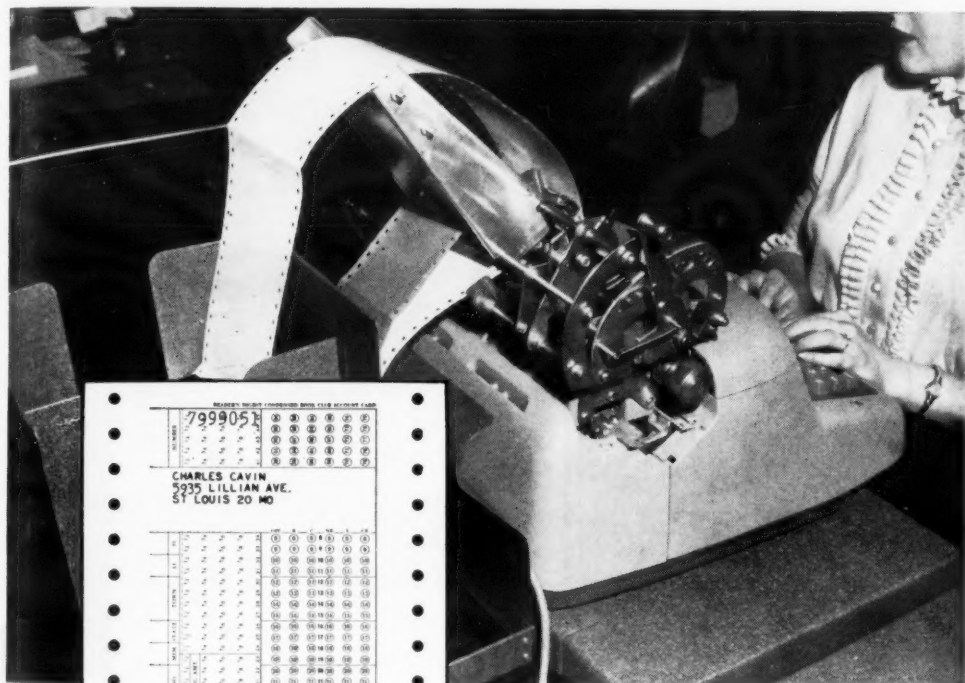
repeating

methods

How a master account card

simplifies

ADDRESSING
BILLING
POSTING



NAME	ADDRESS	CITY	STATE	ZIP
7999051	CHARLES CAVIN	ST LOUIS	MO	
7999052	PAUL F. MAIRE JR	BERKELEY	CA	

NAME	ADDRESS	CITY	STATE	ZIP
7999052	PAUL F. MAIRE JR	BERKELEY	CA	
7999053	PAUL F. MAIRE JR	BERKELEY	CA	

Master account cards being prepared in continuous, marginally-punched strips.

A revision of the Reader's Digest Condensed Book Club's label-billing, record-keeping system was undertaken recently to accommodate a rapidly growing membership. The substitution of punched cards for stenciled plates has made possible a more complete mechanization of functions. These cards serve as both a master addressing stencil and a record of account. The system can be adapted to any regular promotion, sales, or billing mailings.

Members of the Book Club receive new volumes automatically. The vast distribution of books and bills, and the posting of records, created a real need to improve service. In addition to meeting this need, the new system saves time and labor, and also allows intensive analysis of operations.

Procedures which were previously manual, are now mechanically-operated. The basis of the new system is a marginally-punched, continuous form. Master account cards are initiated by

No Doubt About It!

"The
dictionary habit"
increases office
accuracy,
cuts costs



The success of your business may well be affected by the accuracy of your correspondence. No doubt about it, poorly worded correspondence and inaccurate facts and figures have ruined many business transactions. That is one reason why it will pay you to equip every executive, stenographer, and secretary with an individual copy of Webster's New Collegiate Dictionary and to equip your office or departments with at least one copy of Webster's New International Dictionary, Second Edition.

Assure accurate
correspondence

When you place these up-to-date reference books at the finger tips of your personnel, you minimize the human temptation to guess, and your business gains the prestige of correctly spelled, precisely written correspondence with the added assurance of accuracy.

Increase office efficiency

You increase office efficiency, too. Stenographers and secretaries without a desk copy of Webster's New Collegiate waste valuable time tracking down the correct spelling, proper division, or standard abbreviation of a word. Executives in an office not equipped with Webster's New International Dictionary, Second Edition, must often search through numerous special reference books to find information that would be at their finger tips with this "great question answerer."

CAUTION: Merriam-Webster dictionaries are directly descended from the original work of Noah Webster, America's greatest lexicographer. They are kept constantly up to date by the famed permanent Merriam-Webster editorial staff. Insist on Merriam-Webster — the finest dictionaries with which you can equip your office — at book, department, or stationery stores.

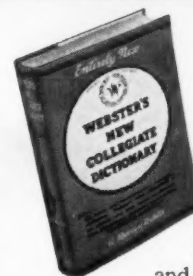
This office saves \$2600 per year

In an office employing 25 stenographers, it was found that each had to confirm the correct spelling or usage of four words per day. Approximately five minutes are lost each time in checking either a dictionary located somewhere else in the office or through interrupting a fellow worker.

At the average payroll rate of \$1.25 per hour, the 4 1/2 hours per week of lost time

cost approximately \$2600 per year—more than 17 times the cost of supplying each stenographer with her own copy of Webster's New Collegiate Dictionary!

How much are you losing by not having a Webster's New Collegiate on every desk? (Remember: you get better letters, too.) Call your office supply dealer today! Get the best. Insist on genuine Merriam-Webster dictionaries.



For desk use

Webster's New Collegiate assures correct spelling, proper word division, precise meanings, accepted abbreviations, preferred pronunciations, accurate word usage, and sound facts about persons, places, weights, measures, monetary units. This up-to-date "business handbook" has 1,196 pages, 125,000 entries, and costs only \$5.00 unindexed, \$6.00 indexed. Even less for ten or more.

For general reference

Webster's New International Dictionary, Second Edition, is an unimpeachable volume of 600,000 entries, thousands of encyclopedic articles, 12,000 illustrated terms, magnificent color plates, biographical and geographical sections. It is "the Supreme Authority" of the nation's courts, universities, and the Government Printing Office. It is equivalent in type matter to an 18-volume encyclopedia—truly the greatest value in book form in the realm of knowledge. Yet it costs only \$35. A handsome table specially designed to hold the book at a convenient angle is available at \$29.50.

Write G. & C. Merriam Company, Dept. 2M-6, Springfield 2, Mass., to learn how these books can save you time and money.



A Merriam-Webster

(Circle 287 for more information)

Records roll... to the
seated operator—
reduce record handling costs
25% to 55%!



by Watson

Apply production line techniques to
record keeping with **ROL-DEX**
working-level-files . . . organized
work centers that speed record
handling and *reduce costs!*

Records **ROLL** — to the seated operator —
increasing speed and efficiency . . .
improving working conditions . . .
reducing fatigue and error.

No matter how large or how small your record keeping requirements — ROL-DEX is built to fit your needs — and you use your present records — no new forms to buy...nothing to retype.



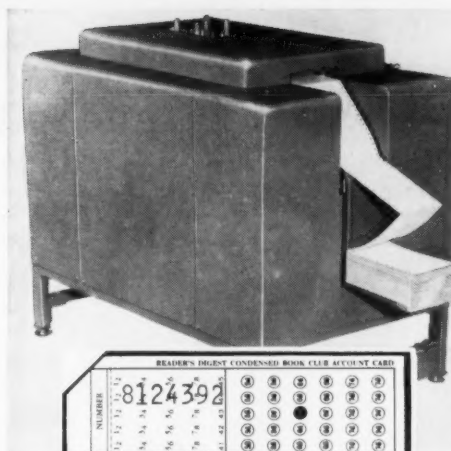
WATSON MANUFACTURING CO., Inc.
Rol-Dex Division, Dept. M-17
Jamestown, New York

Please send me information about ROL-DEX record units.

Company.....
Name.....Title.....
Street.....Zone.....
City.....State.....



WATSON (established in 1887) also builds a complete line of filing
cabinets and courthouse, bank and hospital equipment.
(Circle 314 for more information)



READER'S DIGEST CONDENSED BOOK CLUB ACCOUNT CARD																																																																																																																							
NUMBER		8124392																																																																																																																					
MRS. S. W. TOROSIAN																																																																																																																							
445 E 17TH ST																																																																																																																							
BRONX 57, N. Y.																																																																																																																							
<table border="1"> <tr> <th>DATE</th> <th>MEM. NO.</th> <th>MEM.</th> <th>BILLING AMT.</th> <th>ORDER NO.</th> <th>DATE</th> <th>MEM. NO.</th> <th>MEM.</th> <th>BILLING AMT.</th> <th>ORDER NO.</th> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td> </tr> <tr> <td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td> </tr> <tr> <td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td> </tr> <tr> <td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td> </tr> <tr> <td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td> </tr> <tr> <td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td> </tr> <tr> <td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td> </tr> <tr> <td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td> </tr> <tr> <td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td> </tr> </table>										DATE	MEM. NO.	MEM.	BILLING AMT.	ORDER NO.	DATE	MEM. NO.	MEM.	BILLING AMT.	ORDER NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
DATE	MEM. NO.	MEM.	BILLING AMT.	ORDER NO.	DATE	MEM. NO.	MEM.	BILLING AMT.	ORDER NO.																																																																																																														
1	2	3	4	5	6	7	8	9	10																																																																																																														
11	12	13	14	15	16	17	18	19	20																																																																																																														
21	22	23	24	25	26	27	28	29	30																																																																																																														
31	32	33	34	35	36	37	38	39	40																																																																																																														
41	42	43	44	45	46	47	48	49	50																																																																																																														
51	52	53	54	55	56	57	58	59	60																																																																																																														
61	62	63	64	65	66	67	68	69	70																																																																																																														
71	72	73	74	75	76	77	78	79	80																																																																																																														
81	82	83	84	85	86	87	88	89	90																																																																																																														
91	92	93	94	95	96	97	98	99	100																																																																																																														

Electric die cutter punches strips and trims them.

typing new member name and address on each card. As the card strips are being typed, a continuous, marginally-punched carbon is fed beneath the card form, face up, which produces a reverse image on the back of the card, which serves as the addressing master.

Next, these forms are made into tabulating cards in an electric die cutter. This machine cuts the printed cards from the continuous strips and punches guide holes in them. This is to later facilitate account clerks in hand-punching payments on the cards.

The cards are code-punched in three stages: 1) by source, type, date, and order number, 2) city and state, and 3) member's name and address. When the new order forms, now cards, have been coded, they are in-filed with existing account records.

When the time comes for quarterly book distribution and billing, equip-



PAYCHECK "OUTLOOK" ENVELOPES

Eliminate Time and Expense of Addressing, also chances for Errors.

Paycheck "Outlook" Envelopes are absolutely opaque. Essential when wages are paid by check. Nothing shows but the employee's name. This improves personnel relations.

WRITE TODAY!



Send for Samples
and Prices Today

OUTLOOK ENVELOPE CO., Est. 1902
Originators of "Outlook" Envelopes
1001 W. Washington Blvd., Chicago 7, Illinois

(Circle 293 for more information)

SOUNDEX PARTITIONS

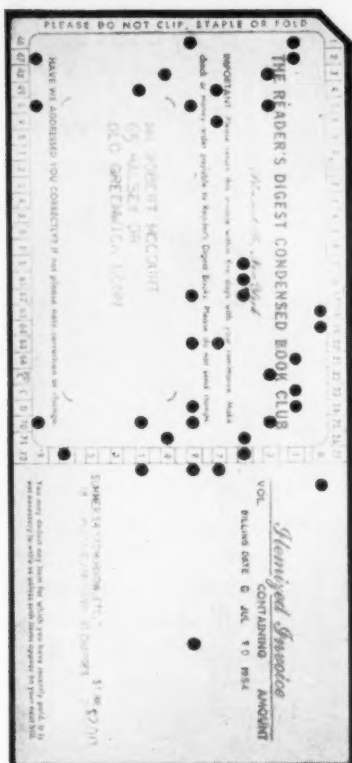
SOAK UP NOISE
LIKE BLOTTERS
SOAK UP INK.
Perforated surfaces
plus acoustical core
turns the trick!

WRITE FOR
FREE CATALOG TODAY.

GR Products Inc.
142 FEDERAL SQUARE BLDG.
GRAND RAPIDS, MICHIGAN

(Circle 319 for more information)

methods



The master account card is used to address and punch this invoice form.

ment, incorporating a multi-control punch and addresser is used. The account record and master cards are fed into it. At the same time, printed label-invoices are passed through, producing an addressed, hole-punched card corresponding to each selected account card. Then they are run through a statement printer machine which itemizes and totals the bills. They are inserted in window envelopes and attached to the book cartons. These invoice cards serve as labels for mailing, as statements for members, and as transmittal cards when payments are made.

All payments are classified as either "straight" or "miscellaneous." Straight payments are those which are returned with the punched invoice cards, and are posted mechanically. These are run through a collating machine. Otherwise, the account clerks punch the payment into the account card as a credit. The hand-punch is pin-pointed to its proper location through the guide holes punched in the die-cutting operation.

The new system has reduced space and labor costs per account, which is particularly important with the rapid membership increase, as well as giving better control and faster, more accurate processing of accounts. m/m

march 1955

IT'S NEW!

Announcing the newest, finest
10-key calculating-adding machine



the COMPTOGRAPH "202"

brought to you by Felt & Tarrant Mfg. Co., makers of
the world-famous Comptometer Adding-Calculating
Machine since 1886

FIGURES FASTER THAN YOU THINK!

Adds, subtracts, multiplies, even divides. Operates at startling speed of 202 revolutions per minute. Automatic Visi-balance window tells instantly your true running debit or credit balance without printing subtotal or total. Speed without fatigue--keyboard designed to eliminate lateral hand movements.

Exceptionally quiet, all-electric operation. Constant factor multiplication, erase

tab-backspacer, AC-DC motor. Single-cycle action eliminates "runaway" tape. Instantaneous subtotals or totals at any time. Direct action segment printing in two colors, modern design, portable.

Get more details about this brilliant new office performer. Better still, ask for a free office trial. Simply fill out and return the coupon below.

FELT & TARRANT MANUFACTURING COMPANY

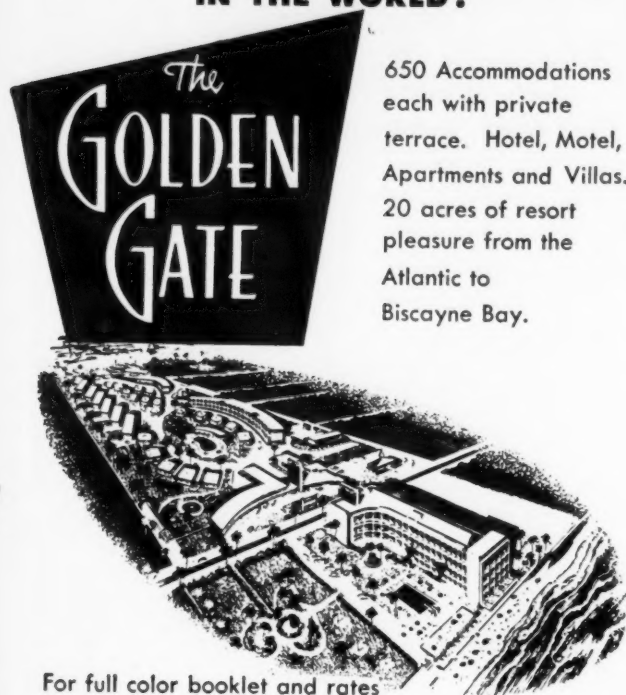
- 1712 N. Paulina St., Chicago 22, Ill.
- Gentlemen: Without cost or obligation—
- ☐ I want more information about the new COMPTOGRAPH ☐ Please arrange for a free office trial
- Name _____
- Company _____
- Address _____
- City _____ Zone _____ State _____

(Circle 273 for more information)



The new COMPTOGRAPH CALCULATING-ADDING MACHINE, the COMPTOMETER DICTATION MACHINE, and the COMPTOMETER ADDING-CALCULATING MACHINES are products of Felt & Tarrant Mfg. Co., Chicago 22, Ill. Offices in principal U. S. cities and throughout the world.

LARGEST RESORT OF ITS KIND IN THE WORLD!



650 Accommodations
each with private
terrace. Hotel, Motel,
Apartments and Villas.
20 acres of resort
pleasure from the
Atlantic to
Biscayne Bay.

For full color booklet and rates
See your Travel Agent or Write:

JOHN M. DUFF, Jr.
General Manager

ON THE OCEAN AT 194th STREET, MIAMI BEACH

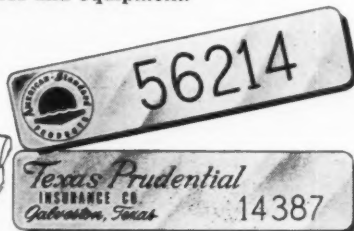
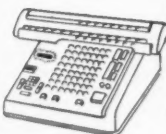
(Circle 276 for more information)



SERIALLY NUMBERED
Autographs
"Tags that Perfect
Property Control"
say METHODS & SYSTEMS MEN

"Found! The vital link that perfects property control. One type of tag, one method of mounting, uniform "out-front" placement and legible numbers . . . outstanding attributes of this innovation in the "tagging" of furniture, fixtures and equipment."

SOLVENT-ACTIVATED
ADHESIVE BACKING



Attractive
"OUT-FRONT"
Property Tags

that **Stick!**

WRITE TODAY
for FREE booklet, "HOW TO
PERFECT PROPERTY CON-
TROL." We'll include "try
before you buy" samples.

METALcraft INC.
MASON CITY, IOWA, U.S.A.

(Circle 288 for more information)

NO SCREWS, RIVETS OR TOOLS

"SERIALLY NUMBERED AUTO-
GRAPHS" are produced from lustrous
.016" Satin Aluminum. They're much
more durable than foil or paper labels
. . . more impressive and easier to
mount than conventional "tags." Mount
them in seconds on both
smooth and crackle finish surfaces.
Simply brush solvent on the adhesive
backing and press into place with
your fingertips.

WHAT MANAGEMENT SHOULD KNOW ABOUT

Industrial Health Programs

One of the deeply satisfying things about work in the industrial health field is that we are "on the side of the angels," and find it "good business" to be there. Our problems usually stem from lack of financial support, but not from lack of moral support. Management may have once looked upon each employee as simply a pair of hands or a strong back. But today, in our country, at least, I do not question management's desire to maintain the health of each employee. I do wonder, however, how we can show management that it can do what it wants to do in this field, while still acting in the balanced best interest of the owners of the business.

Management wants and must get a satisfactory return on the investment it makes in industrial health. It is simple to say, but the return on this investment is usually so elusive and intangible that few have been successful in measuring it. Most have been forced to be content with assumed returns in the forms of reduced absenteeism, lessened turnover, or better employee attitude with resultant higher productivity. These are easily said, but hard to prove when trying to justify an increase, or perhaps even the continuance of certain industrial health programs.

What are the yardsticks?

So the *first objective* of a modern industrial health program, and perhaps the most difficult of attainment, is the *setting up of yardsticks by which the effectiveness of effort in this field can be measured*. Absenteeism, for example, is often used as one of the yardsticks for measuring the effectiveness

Can industrial medicine pay for itself?

Why the small firm has a different problem

The industrial doctor vs. the private practitioner

of the industrial health program. Yet this yardstick is subject to so many other influences that its validity is highly questionable. Some factors that improve a plant's absenteeism are:

Good weather:

Absenteeism is normally lowest during the second and third quarters of each year.

Male, rather than female, employees:

Men are usually absent about two-thirds as much as women.

Economic depression:

Absenteeism hit a twenty-five year low during the great depression.

Good employee relations:

Absenteeism is lowest when employees like their work, like their boss, and are accepted in their work groups.

Each of these factors can cause a swing of 30% or more in absenteeism, and all are outside the control of the plant doctor. So, absenteeism, from management's standpoint, leaves much to be desired as any sort of measure of performance.

Employee turnover, Workmen's

Compensation costs, and employee morale have similar drawbacks when used as yardsticks to evaluate industrial health effort. The best I can do is to indicate the direction in which I am hoping to find a yardstick. It is in the field of employee effort.

The best area to explore

Let us assume, for example, that an industry is paying its employees an average of \$4000 a year, and spending an average of \$20 a year for maintaining the health of each employee. The industry's management is interested in the well-being of its employees but also has the responsibility of spending the owner's money in the over-all interest of the owner. Management does not know whether it is now extravagant in spending \$20 per year on each employee, or whether it could wisely spend two, three, or five times that amount. The yardstick I am seeking will be related to the employee's earnings and effort. Here is what might be considered.

It seems likely that most employees (and that includes many of us) do not work at top effort, or top efficiency, except in spurts. Time is wasted gossiping with other employees, in extra minutes in the washroom, and in just plain dawdling at the job. Effort is wasted in doing things inefficiently for lack of knowing the best way, or effort may be wasted deliberately.

Many employees have poor vision and do not see as well as they might if fitted with proper glasses, or may not work as hard as they might if they had better health, or have as good an attitude as they might if working conditions were better. Result? Well, it is

methods

mployee mo-
when used
industrial
n do is to
which I am
t is in the

le, that an
ees an av-
pending an
maintaining
e. The in-
erested in
loyees but
f spending
over-all in-
ment does
w extrava-
ar on each
uld wisely
times that
m seeking
employee's
what might

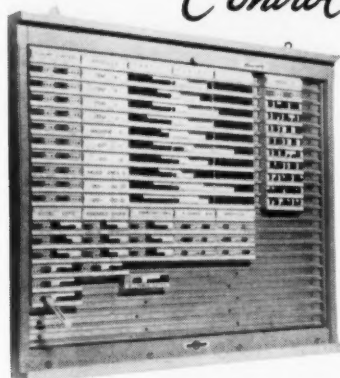
employees
(us) do not
efficiency,
rasted gos-
, in extra
nd in just
Effort is
ciently for
, or effort

por vision
y might if
e may not
f they had
d an atti-
ng condi-
Vell, it is

methods

PLANOMATIC

Control



NEW
modern
way

for the present and future progress

"Effective visual control of operations is achieved by use of sliding and revolving color and numeral discs. The needs of all phases of business and finance are quickly and accurately recorded. Keep abreast of schedules and competitive markets with Planomatic."

GET THE FACTS, WRITE



LANSDALE
PRODUCTS CORP.
LANSDALE, PENNA.

(Circle 282 for more information)

MAIL BAGS PROTECT

..YOUR
MAIL!



Mail bags control and safeguard receipt and delivery of mail. Used by important firms everywhere. Last for years.

Size	Canvas and Leather	All Leather
14"x18"	No. M112 \$18.00	No. M551 \$25.00
16"x20"	No. M113 20.00	No. M552 28.00
18"x24"	No. M114 22.50	No. M553 32.00
20"x30"	No. M115 27.50	No. M554 39.00

If uncertain about size, order two—return one.

CUT MAIL HANDLING COSTS!

Lightweight, spring steel rack holds mail bag open wide. Heavy bags easily moved on rack with wheels.

M400 Rack... \$ 7.50

With Wheels... 10.00

M300 Heavy Canvas

Bag 24" x 40"—

Stencilled With Your

Name 6.00

If your dealer cannot supply you, order direct on trial. Satisfaction guaranteed!



CAN-PRO CORPORATION
DEPT. M • FOND DU LAC, WISCONSIN

(Circle 259 for more information)

probably safe to guess that if we could correct all of these things, the worker productivity might go up twenty or thirty percent, or more.

What has this to do with medical yardsticks? Just this: *Except for a man's own supervisor, it is likely that the industrial nurse or doctor will see and talk to each employee more often than anyone else representing the company to the employee.* In most plants each employee will see the nurse an average of once a month. If, as a result of these visits, *the employee is encouraged to believe that his management is sincerely interested in his well-being,* isn't it likely that he will put forth a little greater effort and a little greater care for the company?

A little greater effort on the part of each employee will more than repay the cost of the most progressive of our employee health maintenance programs. For example, an annual health check-up for each employee could normally be done for a cost in the order of \$25 for each person examined. If the employee's response to this check-up was to put forth five percent more effort he would be returning about \$200 for the \$25 investment! Only *one percent more effort* would return \$40—more than enough to repay the cost with margin to spare.

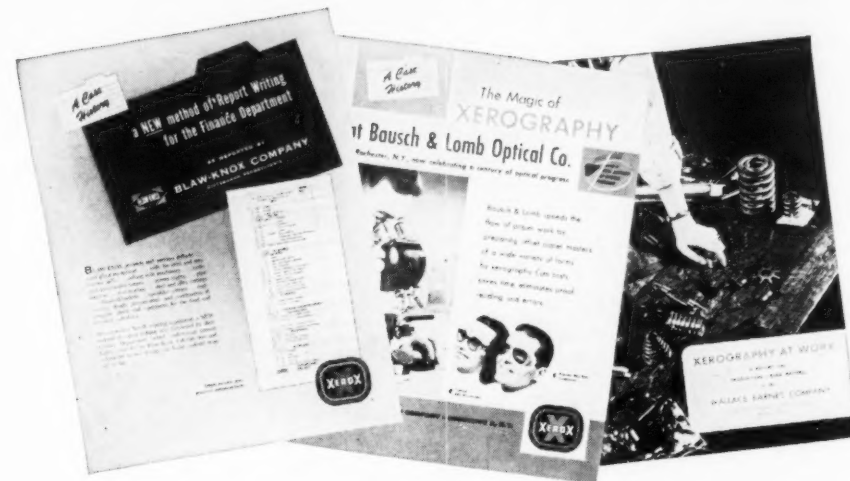
So the yardstick I hope to find will be related to productivity. And, let me say here, that I do not approve the "shooting at the moon" technique whereby we seek to expand our function limited only by the funds we can get. I think we must set limits to our own expansion that are consistent with the over-all objectives of the business of which we are a part.

The object of industrial medicine

This brings me to the second objective which I would say is for *each industrial medical unit to establish its own goals consistent with the over-all objectives of the business of which it is a part.* There is no reason to assume that the objectives of a modern industrial health program should be the same for every business. Of course, we can accept objectives like:

- ... to keep employees at work
- ... to make them willing, eager if

HOW XEROGRAPHY (ze-rog-ra-fee) cuts duplicating costs in a wide variety of SYSTEMS APPLICATIONS



• Send for these case histories

1. Progressive Report Writing at Blaw-Knox Company
2. Production Control System at Bausch & Lomb Optical Co.
3. Production Order Writing at Wallace Barnes Company

In addition to the hundreds of applications in general duplicating, xerography is becoming increasingly important in systems procedures. Blaw-Knox, Bausch & Lomb and Wallace Barnes are using xerography and offset duplicating to cut duplicating costs in their specific applications. The versatility of xerography is shown in three completely different procedures explained in detail in the case history folders available on request.

These companies are only a few of the many hundreds in business, industry and government using the magic of xerography to speed the flow of paperwork and to cut duplicating costs.

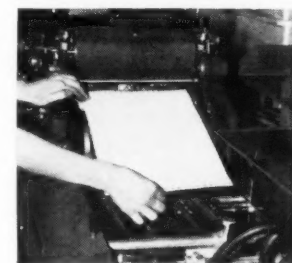
Anything written, typed, drawn or printed can be reproduced with photographic accuracy in about 3 minutes onto an offset paper master for runoff of multiple copies on an offset duplicator. Original copy may be enlarged, reduced or reproduced same size by xerography in XeroX® copying equipment. Copies can be made from one or both sides of original material by xerography.

For use in diazo type machines, translucent intermediates can be made from any original subject in the same speedy way.

SPEEDS PAPERWORK!



Original is copied onto paper master by xerography in less than 3 minutes.



Paper master is placed on offset duplicator to produce multiple copies.

THE HALOID COMPANY
55-3X HALOID STREET, ROCHESTER 3, NEW YORK
BRANCH OFFICES IN PRINCIPAL U.S. CITIES AND TORONTO

XEROGRAPHY

The fastest, cheapest, most versatile way to make masters for duplicating



(Circle 279 for more information)

Now **R.C. Allen** Visomatic

CARBON RIBBON TYPEWRITER

for executive correspondence . . . only \$215.00

For only a few dollars more than ordinary standard typewriters, you can own the new Visomatic Carbon Ribbon, the finest typewriter you could buy. This is an example of the brilliant clarity and sharp letter impressions produced on this superb new machine having Imperial Elite Type.

For executive correspondence, you have a choice of type faces; visible, automatic margins; plus the advantages of low cost carbon ribbon typing.

The VCR's sharp, uniformly black letters make it ideal for reproduction work too. The carbon ribbon is instantly interchangeable with a cloth ribbon. It's the easiest operating, most versatile machine you can buy, and it's built to last a lifetime . . . yet, it's the only carbon ribbon typewriter at this low "standard typewriter" price of \$215.00.

R. C. Allen dealers give the biggest possible allowances on old machines . . . it may cost less than you think to have new VCR's. Write us for complete information and name of nearest dealer or consult your telephone directory.



Model 711 C

R.C. Allen Business Machines, Inc.

684 Front Avenue, N.W., Grand Rapids, Michigan

(Circle 252 for more information)

possible, to give their skill, care, and effort to their jobs . . . to avoid rather than cure industrial disease or accident . . . to render first aid

But are we very understanding of the problems of industry when we dogmatically say that an approved industrial health program shall include complete preplacement and periodic health examinations by a doctor, adequate facilities under the charge of a doctor, employee health education, adequate health records, etc. That type of program fits to a "T" our large established industrial plants. In fact, in the case of my own company, General Electric, we recently opened a new industrial health clinic at our Schenectady Works that has cost us over a million dollars.

Would such a program, though, be feasible for a business temporary in nature like some logging operations; or seasonal like some harvesting and canning operations; or fit a new business desperately short of capital? I would think not. In fact, I suspect that one of the reasons why industrial medicine is lagging in small businesses (and that means over 90% of all businesses) is the fact that we set the target so high that they do not even try to reach it. How much better it would be if each business were encouraged to set its industrial health programs on a basis consistent with the firm's other objectives.

During the past two years I have visited and inspected, as part of my job, the industrial health facility in each of over a hundred different plants within and outside of my own company, and both in America and abroad. These plants have ranged in size from one employing 24 persons to one having over 30,000 employees. In each of these widely different plants there has been a similarity of management's interest in the well-being of its employees, but great differences in their ability to provide better job environments or improved health maintenance programs. So it has seemed to me that rather than set an identical target for each plant that it would be wiser to set individual goals that had a chance of being reasonably attained and at a later time new goals might be set.

Industrial vs. private practice

The third objective, and I mention it with some hesitation, is to develop and follow a set of ethics consistent with our objectives. The medical profession has many critics today and most of the criticism falls in the field of ethics. They include disapproval of a scale of fees varied to income, fee splitting, and one doctor's reluctance openly to criticize another. These are not aimed primarily at the industrial doctor, but he is not free of ethical problems. For example, the medical profession has tended to disapprove the paying of salaries to physicians and to encourage the charging of fees for services rendered. Sounds reasonable, doesn't it? But let's see how it works when we hire a part-time doctor for one of our small plants.

I shall refer to an actual case of a plant I visited this year which was suffering from extensive and expensive employee turnover. This plant has 500 employees, mostly girls. Some of the girls work a few months and then get married; others work awhile, then leave for better jobs. The result is a labor turnover of about 100%. That means that the plant must hire about 500 new employees during the year in order to maintain its employment at 500 throughout the year. It sounds incredibly high, but it is an actual fact.

Now each of these new employees must be taught her new job, must be added to the payroll, and made a part of the employee insurance and benefit plans. It is estimated that it costs nearly \$300 to add a new employee and bring her up to normal productivity. Therefore, the high turnover is costing this plant about \$150,000 a year.

What has this to do with the doctor? Well he gets \$5 for each preplacement examination he performs. The higher the plant turnover the more money he gets. Likewise, he gets paid on a fee basis for each industrial injury at the plant. The more injuries at the plant the more fees he gets. Moreover, there is no fee nor inducement to the doctor to go in the plant, look for job hazards, and try to lessen accidents and reduce turnover. It is actually the other way. The doctor's compensation goes up in proportion to the plant's

methods

troubles. Other members of management expect to be paid in proportion to the plant's successes rather than its failures. Then why not have the doctor paid on a basis where the better industrial health he brings a business, the higher his earnings? In other words, pay him better for his ounce of prevention than for his pound of cure.

From management's standpoint it would make more sense to pay him a salary (a good one, too) to keep well employees well, to protect these employees by carefully watching their job environment, and to call attention to things that might cause accidents.

When management decides to put its part-time doctor on a retainer basis, instead of a fee-per-visit basis, it might consider giving the doctor "employee status." In the case of companies with advanced employee benefit plans, this arrangement provides special benefits not otherwise obtainable. From the doctor's standpoint, the retainer fee, or salary, provides a dependable source of income, but more important to him may be the opportunity to take part in the employee pension plan, special stock purchase or savings plan open only to employees, and low-cost group life insurance plans.

Give the doctor employee status

From management's standpoint, giving the part-time doctor employee status has advantages too. It will often provide enough added inducement to attract a higher caliber doctor than the salary alone would attract. It tends to make easier the acceptance of the doctor as a part of management. And it encourages the doctor to provide the management, of which he is now a part, with an industrial medical program fitted to the needs of the plant. By giving the doctor employee status the company can insist that the doctor keep up-to-date in his field, and can direct him to participate, at company expense, in meetings, clinics, or post-graduate courses that assure his increasing his professional competence.

A second area in the field of ethics has to do with outside practice and this, I am afraid, is a vicious circle. Many industrial physicians, at what are considered full-time jobs, are paid so little that they feel forced to develop

outside practices. *These outside practices take time and interest away from their industrial jobs.* Result: they are not worth more than they are paid. The correction might be raising their salaries with the provision that they drop the outside practice.

Then there is the matter of the relationship with the community doctors—a delicate one for the industrial doctor. If he expands his in-plant service, the private practitioner feels he is being discriminated against. If he keeps the in-plant service limited to industrial illness or injury, many employees will be sore at management for failing to let them have simple medical attention for personal ills. Solution? Probably it lies in the doctor adhering to the principle that all non-industrial patients will be referred to their own physicians if the matter is serious, or if it seems likely that one or more re-visits will be necessary. This does not exclude the many simple administrations like easing a headache, or dressing a simple injury, but does exclude the type of personal injury or illness that could be major or is likely to be prolonged. Examples might be the care of a severe sprain, setting a broken bone, or treating a persistent, non-occupational dermatitis.

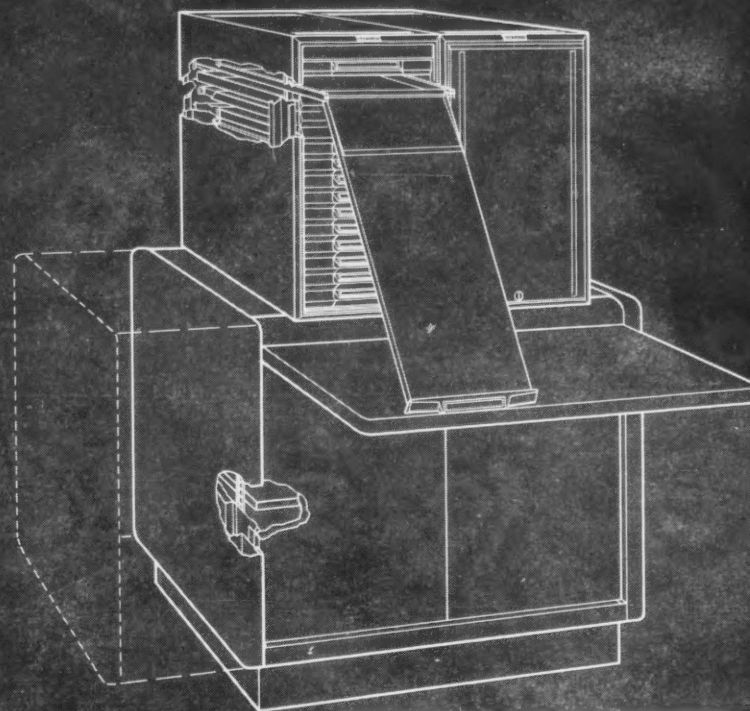
However, it should be remembered that the industrial doctor and nurse have a responsibility not only to keep well employees well and able to work, but to help create in them an attitude of willingness, even an eagerness, if possible, to work. This requires time on the doctor's part to counsel with employees on those personal problems that interfere with the work of the employee. The doctor can render a particularly valuable service in areas like alcoholism, whether advising the employee about himself or about a member of his family.

It is worth mentioning at this point that there seems to be a growing realization on the part of community doctors that good industrial medical programs assist them rather than compete with them. They aid them by uncovering disabilities that call for treatment by the employees' own doctors—cases that otherwise might have gone unnoticed until too late for treatment.

These are just instances, or details.

(next page, please)

ACME VISIBLE VIRGINIAN LINE CABINETS



IN THE NEW ACME GREYTAN

**world's
fastest
visible**

Completely new . . . completely different . . . designed for easier, speedier reference and posting, made to precision specifications, engineered for maximum strength, finished a new light, warm color . . . a new high of efficiency and beauty in visible equipment.

NEW COLOR—Greytan . . . a light warm color, pleasingly harmonious with modern office machines and furnishings.

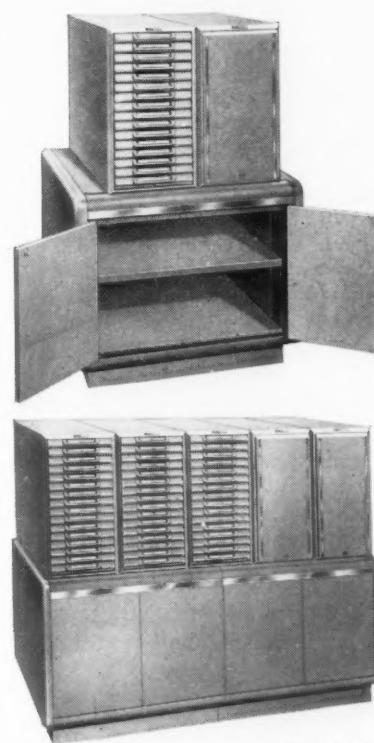
NEW APPEARANCE—characterized by crisp, prismatic, functional lines.

GREATER STRENGTH—maximum rigidity achieved by formation of shell and reinforcing members.

GREATER CONVENIENCE—with more capacity, wider label holders slanted for visibility, more finger space.

EASIER TO USE—intermembered slides forming partitions between trays, nylon rollers and rubber stops reduce friction, provide smooth, speedy, quiet action.

**ONLY THE RECORDS THAT ARE
USED PROFIT A BUSINESS**



ACME VISIBLE

Acme Visible Records, Inc.

CROZET, VIRGINIA

Representatives in all principal cities

(Circle 251 for more information)

"With ads like this
in the **POST**...

...I'm boosting
employee morale!"



*Telling your employees of
your interest in their comfort,
convenience and health!

Throughout the year, advertisements in the Saturday Evening Post will bring the story of Linen Supply Service to millions! Your employees will see and read these ads... become aware of this fine service used by better offices and establishments everywhere. They'll better understand why you provide this service for them... and their

appreciation will be shown in better employee relations, higher morale, increased efficiency.

Be sure you are aware of all the advantages and services your local linen supplier has to offer. Call him now for all your washable cotton needs. Look under LINEN SUPPLY or TOWEL SERVICE in your classified directory!

"Let me tell you about
my operation!"



You've seen those fluffy-soft cotton towels they use at beauty shops... the sparkling-clean cotton table linens you find at better restaurants... and the crisp, attractive cotton uniforms and coats the salespeople wear in drug and grocery stores? Well... that's my operation... linen supply service! And those are only a few of the many, many different kinds of washable cotton articles we pro-

vide to virtually every type of business, profession, factory and public institution. Next time you go anywhere, take notice. Clean cotton linens are a sure sign someone cares for your comfort, convenience and health!

Mr. Businessman:

this is LINEN SUPPLY service

You have no investment, no inventory, no maintenance. Everything is furnished and serviced by your linen supplier, at low cost. Dependable delivery and pick-up maintain a continuous supply of your exact linen requirements—large or small. Call your local supplier listed in the classified directory under LINEN SUPPLY or TOWEL SERVICE—or write Linen Supply Association for free descriptive booklet.

Linen Supply

ASSOCIATION OF AMERICA

and National Cotton Council

22 W. MONROE ST., CHICAGO 3, ILL.

In any business... Linen Supply is good business.



in Beauty Shops

in Restaurants

in Grocery Stores

Linen Supply

ASSOCIATION OF AMERICA
and National Cotton Council

22 W. MONROE ST., CHICAGO 3, ILL.

In any business... Linen Supply is Good Business

(Circle 285 for more information)

The important thing is that the industrial medical profession has to develop and practice a code of ethics in every phase of its work. And it must develop this code to fit its own needs which may differ from those of the private practitioner.

The three objectives I think most important for industrial medicine are:

1. Diligently seek a set of yardsticks to measure value of their work.

2. Participate with management in establishing industrial medical services tailored to the broader objectives of the business of which it is a part.

3. Reach towards the development and practice of a set of industrial medical ethics that will bring the lasting admiration of all the people for the deserving work being done in this field.

Attainment of these objectives will help get management's financial support for the expansion needed in the field of industrial health, will help attract talented young men to this field, and will make it more likely that worthy contributors in this field will be recognized for their efforts. m/m

This article was adapted from a speech presented at the Pacific Northwest Industrial Health Conference.

"worth

Cost of absenteeism: Absenteeism resulting from sickness and accidents cost American business an estimated \$9,000,000,000 a year, or about \$1,275 every second, according to the Small Business Administration. This cost to business comes from an estimated 400-500 million man-days lost every year from temporary disability due to industrial and non-industrial sickness and accidents. A new booklet, *Health Maintenance for Greater Efficiency*, lists four factors that every small business owner should recognize:

1. Efficiency of employees is dependent upon proper selection, utilization, and maintenance—just as efficiency of machinery and equipment.
2. Recognition of the importance of health by management and the provision of health services builds incentive in desirable workers.
3. Reduction of labor turnover, and sickness absenteeism will give the employer greater control over production and sales.
4. Elimination of potential hazards cuts Workmen's Compensation costs.

repeating"

methods

thought starters

Thought Starters deal with a "practical solution to a management problem." The Editor invites contributions—which are paid for at our normal space rates.

TABULATING *thought starter*

Defective punched cards are "ironed out" by new machine

The increasing use of punched card checks has raised the problem of handling those that become damaged. The Continental Illinois National Bank and Trust Company experienced a slowdown of operations due to mutilated cards jamming the sorting and collating machines.

In addition to the volume of punched card checks issued by its customers, the bank also uses them for accounts payable disbursements, payroll, and dividend checks. Approximately 8,000,000 punched cards are processed by the bank per year. Defective cards ran as high as 6 per cent. Many of the cards were sent in wrinkled and creased, or stapled together. As a result, the collating equipment would jam and the bank had to resort to hours of hand sorting, filing, etc.

The bank's resident engineer developed a device based on a magnetic principle which separated the stapled cards. This, however, solved only part of the problem. After a year of research and study, a machine was developed for the company, which "reconditions" the mutilated cards.

First, the cards are put through an over-all knurling process, which serves as a substitute for dampening. Then they go under a series of pressure rollers to iron out all the wrinkles and creases. A rejection mechanism eliminates cards with pins or other fasten-



ers. An electronic "memory" device takes impulses from the sensing mechanism and channels each card to its proper bin. An automatic switch turns off the machine when the stacking hopper is empty or gets too full. The defective cards were reduced to 1%.

For more information, circle number 396 on the Reader Service Card.

METHODS *thought starter*

Vinyl plastic job ticket holders save costly replacements



A. T. Wilson
Supervisor, Stationery Stores
AirResearch Manufacturing Co.
Los Angeles, California

Our Production Control Department usually has about 12,000 shop "travelers" in the system at all times. Until recently, they were using a 10" x 12½" cellulose acetate envelope as a job ticket holder to route orders throughout the plant and company-owned machine shops on the outside. Since the envelopes are exposed to rough handling, acids, grease, moisture, sun, etc., they soon became brittle and cracked, resulting in a replacement after one or two trips through the plant. Actually, we were using 2,500 envelopes per month or 30,000 per year at a cost of 34c each, which amounted to a yearly cost of over \$10,000.

Through a suggestion turned in by one of our employees, we were informed that job ticket holders made of vinyl plastic were non-brittle and resistant to tears, scratches, and wrinkles. Though impervious to sun, moisture, and most acids, they are still highly transparent. Further, due to an electronic sealing process, all edge stitching was eliminated, greatly increasing life.

We placed a trial order and subjected the plastic envelope to a thorough and exacting test. The results were highly satisfactory, and the vinyl plastic envelopes measured up to all expectations. We found that they lasted about six times longer than the

Machine that loves to fold... faster... better... cheaper!



The FH costs less than a standard typewriter

Isn't it wasteful and inefficient to make skilled office workers take time out from more important work to fold sales letters, bulletins, announcements, invoices and like items that have to be folded for mailing?

A Pitney-Bowes model FH can do all such folding jobs for you at much less expense.

The FH can make two folds at once; can double-fold 8½ x 11 sheets at speeds up to 5000 per hour; can make eight different folds in sheets from 3 x 3 to 8½ x 14 inches of different paper weights; can even fold sheets stapled together.

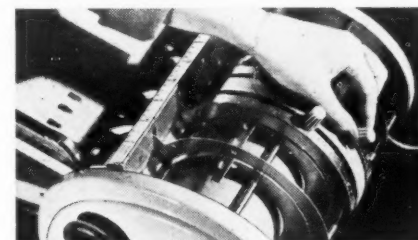
With semi-automatic feed and electrically driven, the FH is fast, accurate and easy to operate. It takes but a few seconds to ready it for a job; simply move two knobs to adjust for the desired folds...easy as tuning your TV.

PITNEY-BOWES Folding Machines



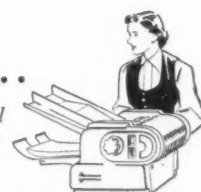
Made by Pitney-Bowes, Inc., . . . originators of the postage meter . . . 93 branch offices, with service in 199 cities in U.S. and Canada.

Little larger than a standard typewriter, and costing less, your FH will quickly pay for itself. Ask your nearest PB office for a demonstration—or send the coupon for free illustrated booklet.



Move indicator knobs to widths wanted . . . And it's ready to go!

Fully automatic model FM folds up to 19,000 sheets per hour.



PITNEY-BOWES, INC.
4547 Pacific St., Stamford, Conn.
Send free booklet on Folding Machine to:

Name _____
Firm _____
Address _____



(Circle 301 for more information)

Webster makes ribbons for 225 office machines

Machines vary. So do operators. And job requirements vary, too. But two needs are constant — the need for clear legible work and the need for economical production.

Webster meets these needs with a wide variety of inked ribbons for specific machines and specific kinds of work. They are made from the finest materials, either silk, long staple cotton or nylon. And there is a wide choice available in color and ink intensity.

Naturally, these fine ribbons are unconditionally guaranteed. Webster introduced the first non-filling typewriter ribbon in 1889. Since then they've been precision made and carefully inspected, inch after inch, to insure uniformly good service.

The ribbon that does high quality work, dependably and economically, is the best ribbon for your office. Your wisest choice is Webster's . . . consult your nearest dealer or write to —

F. S. WEBSTER COMPANY

10 Amherst Street
Cambridge 42, Massachusetts

acetate envelopes. Since they cost only 25c each, we are saving 9c each in the initial cost, plus an annual replacement savings of from \$5,000 to \$7,000.


QUALITY

thought  starter

Internal "advertising" improves precision quality control

An excellent way of drastically reducing rejects was discovered by Harold Wrigley, Works Manager of the Barry Corporation of Watertown, Massachusetts. Much of the company's work is done to exacting specifications and, therefore, a low rejection rate is very important. The placing of a pair of signs, one over each main aisle of the plant, reduced the rejection rate 50% on all products within a six-month period. The signs carried two messages: one in large letters reads **REJECTS CAUSE UNEMPLOYMENT**, and the other in small letters reads **BE CAREFUL—A QUALITY PRODUCT TODAY MEANS SECURITY FOR TOMORROW**. The company reports that the factory personnel welcomed the signs as a constant reminder that high quality work was expected of them.

SALES

thought  starter

"Automatic secretary" takes orders when offices are closed

The prohibitive expense of maintaining 24-hour telephone order service every day has been eliminated by the installation of an electronic telephone recording device at the Lag Drug Company in Chicago. This wholesale drug supplier now receives orders automatically on nights and weekends, and rushes them out the following day.

The recorder consists of two sections; the first piece of equipment has a cradle on which the telephone receiver rests. When a call comes in, an arm lifts the receiver off the hook. This, in turn, activates a revolving disc on the second piece of equipment. A pre-recorded opening message identifies the firm, and requests the caller to leave his order, which will be recorded. At the termina-




tion of a pre-determined time cycle, which in the case of Lag Drug Company is 1 minute and 50 seconds, the recorded phonograph disc interrupts with a goodbye message. An indicator automatically shows how many calls have been received, so that there is no chance of missing any orders.

The company has found the device to be of such money-saving and time-saving potential, that they have installed their second piece of equipment, with plans to increase the installation as required.

For more information, circle number 376 on the Reader Service Card.

METHODS

thought  starter

Disciplinary demerit system cuts workers' absenteeism

Since the adoption of a demerit and disciplinary program six months ago at its Hicksville plant, the Pittsburgh Plate Glass Company has reduced its absentee-tardiness problem.


Demerits are issued whenever an employee is absent or late. If a worker fails to report his absence in advance, he is charged with four demerits. If he does report it in advance and according to instructions, he receives only one demerit. If his absence is proven unavoidable, no demerit is given. When a worker is late, he receives 1/4 demerit.

An employee receives a verbal warning for two demerits during any six-month period, and a written warning for six demerits. There is a three-day suspension for eight demerits, a five-day suspension for 12 demerits, and a "suspension with intent to discharge" for 16.

The company has found its employ-

ees cooperative; much of this is credited to the foremen. It is their job to talk to the workers, explaining how absenteeism and lateness upset production and shipping schedules, and raise costs. When the foreman receives a notice from the personnel office, he speaks to the worker involved about his demerits and explains the penalties, emphasizing how important his presence is to the smooth operation of the department. Absenteeism has dropped impressively as a result of the plan.

MORALE

thought  starter

Reporter form helps create inexpensive house organ

Two simple outline forms, used at Rose Marie Reid, a swimsuit manufacturing firm in Los Angeles, helped turn a sporadic, one-page, mimeographed sheet containing routine management announcements into a bi-weekly company newspaper.

The gathering of news by inexperienced reporters is usually the deterrent to putting out a regular company publication. The forms greatly simplify reporting by defining the pertinent questions to be asked of a news source in obtaining a story or a personnel interview. One form is used exclusively for a story or "action," while the other more detailed form will result in a thorough personnel interview. The following is a question outline which guides the reporter in an interview:

Reporter's Interview Questions

1. Personnel Background
 - a. How did you get into this type of work?
 - b. How long with the company?
 - c. Past experiences in similar business.
 - d. Education which prepared you for present position.
 - e. Family status—number of children, grandchildren, etc.
2. Relation to Rose Marie Reid
 - a. Nature of job, duties, responsibilities.
 - b. Future plans for your department.
 - c. How these plans affect employees.
 - d. How current problems are being solved—sales increased, safety measures taken, etc.
 - e. Progress made in your department since you came.
 - f. Little known facts about your work which would interest employees.
3. Miscellaneous
 - a. Hobbies or outside activities (lodge work, charities, personnel projects).
 - b. Your daily philosophy as it might be applied by employees.
 - c. Anecdotal material (incidents or stories you think worthwhile to pass on).

Employees, designated from each department, make up the company "re-

An 'employee' not on the payroll cut order-processing time 60%

WHEN A BUSINESS OUTGROWS ITS SYSTEM, AN EXPERIENCED OUTSIDE VIEWPOINT IS OFTEN A BIG HELP, AS IN THE CASE OF THE MOORE MAN WHO STARRED HERE LIKE AN 'EMPLOYEE' NOT ON THE PAYROLL.



THE CASE OF THE SLUGGISH SYSTEM—An old-established company, a leading maker of pencils, prides itself on quality not only in manufacturing but in office method. The demand for its merchandise has increased persistently and finally got so heavy that orders raced

ahead of the staff's ability to process them. Paper work took longer than it should. A single order needed too many writings and, in the aggregate, too many man-hours. The trouble in the system made itself felt in operations like inventory control and slow billing. And then...

Underscoring Efficiency

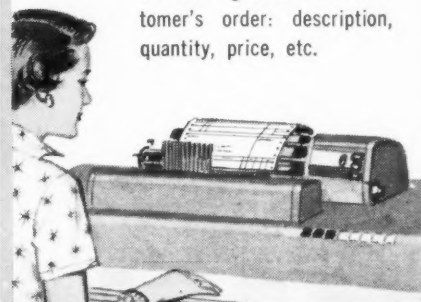


with a 6-part
Moore
FACTORY ORDER
featuring

- Spot carbon tissue
- Carbon opaques
- Spot hecto carbon, etc.

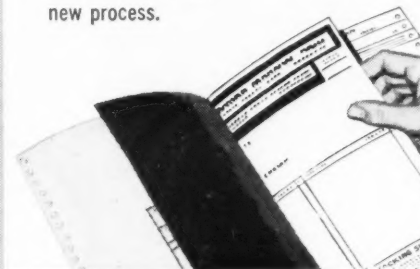
Part 1 is the Factory Order

It's filled out in an accounting machine that prints from punched cards containing details of customer's order: description, quantity, price, etc.



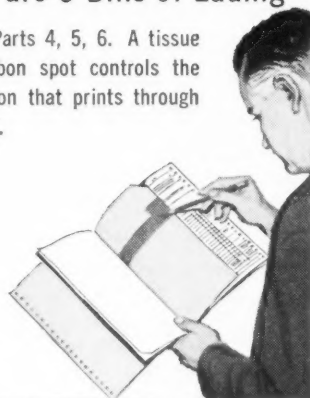
Part 2 is the Label

Also packing slip. It's a hecto master and Shipping uses it on a Spirit Duplicator to run off all the labels that are needed. A fast new process.



There are 3 Bills of Lading

They're Parts 4, 5, 6. A tissue with carbon spot controls the information that prints through to Part 3.



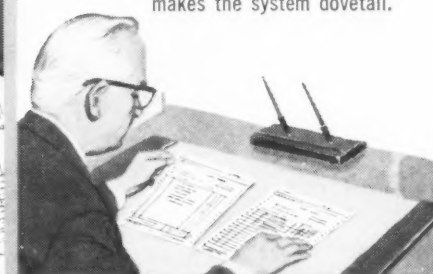
Carbon Spot does the same

It appears on the back of Parts 3 and 4.



The Shipment is invoiced

on a separate 4-part Moore form. Customer gets his copy together with Bill of Lading from the 6-part form. This makes the system dovetail.



Savings and gains: A way to produce speedily all the labels an order needs is one important benefit from the system. *Others are:* 1 writing does the job of 3. Elapsed time from order to shipment has been cut from 20 to 8 hours, a 60% gain. Streamlining saves 400 clerical man-hours a week. So many improvements have been built in

(Circle 327 for more information)

that it proves the wisdom of getting experienced help. The Moore man can be called in to look over *your* problem any time you think he might help. Meanwhile, ask for samples of system improvement in your field. Write: Moore Business Forms, Niagara Falls, N. Y., Denton, Tex. or Emeryville, Calif.





Sound can be subtracted—safely...

Fire-safe Fiberglas Ceilings absorb up to 80% of noise!

Noise in your office means lowered morale . . . decreased production. But *quiet*, brought about by an acoustical ceiling, made of Fiberglas* Sound Control Products, will improve morale . . . boost production and efficiency to new high levels . . . reduce labor turnover.

Fire-safety with beauty! Not only are Fiberglas Acoustical Ceilings the most efficient on the market, but they are rated



Beautiful, too! Here's a plastic-faced, washable Fiberglas Sonofaced* Acoustical Ceiling, one of many types suitable for office use.

(Circle 294 for more information)

incombustible by the Acoustical Materials Association and bear the Underwriters' Laboratories label. They easily meet the strictest safety codes.

Permanent! There's no sagging, buckling, shrinking or rotting to mar the beauty of your Fiberglas ceiling.

And so low in cost! The lowest in cost, in fact, of any fire-safe ceiling on the market! Priced and styled for any location from private office to general space. Easy to maintain, too.

Send for free booklet—"The Ceiling that Cuts Overhead"—and see how Fiberglas Acoustical Tile Ceilings can make your noisiest office pleasantly quiet and efficient. Write today for your copy: Owens-Corning Fiberglas Corporation, Dept. 174-C, Toledo 1, Ohio.

*Fiberglas, Sonofaced (Reg. U. S. Pat. Off.) Stria and Noise-Stop are trade-marks of Owens-Corning Fiberglas Corporation.

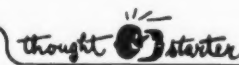


SOUND CONTROL PRODUCTS

- Textured, Perforated, Sonofaced*, Stria* Acoustical Tile
- Textured, Sonofaced Ceiling Board, Noise-Stop* Baffles

porters." They give their stories to the Personnel Department. After careful screening there, they are passed along to the firm's advertising agency. They handle the editorial processing, since their experience allows them to produce the company paper in the most economical manner.

DUPLICATING



Firm mechanizes purchase order writing with duplicating unit

By mechanizing its purchase order writing procedures, the Purchasing Department of the American Machine & Foundry Company has speeded its parts and supply procurement, and currently realizes \$3,500 savings annually in forms cost alone.

Purchase orders total about 35,000 annually. The former method utilized a multi-copy carbon-interleaved set of purchase orders, with a spirit hectograph carbon insert. This limited the number of purchase order copies to be produced by a single typing. It was necessary to type a separate inquiry form.

Since multiple copies of these individual records are needed for the proper control, communication, and recording functions, they decided that duplicator equipment could produce the required number of Quotation Inquiry copies.

Purchase Requisitions and Buy Cards authorize the Purchasing Department to analyze the requirements and select possible sources of supply for Quotation Inquiry purposes. Quotation Inquiry masters are preprinted in non-reproducing ink. A master is typed, and the original number of inquiry forms are duplicated (two for each possible vendor), plus another master from the first. The latter one becomes the Purchase Order master, which is a duplicate of the Quotation Inquiry, and is filed for use in the Purchase Order phase.

By using this duplicator unit, the department has excluded all repetitive writing, provided a progressive record of all actions in the entire Purchasing-Receiving Cycle, as well as eliminated expensive transcription errors and hand-posting on control records.

work center

"... men and machines

don't work in a vacuum.

Though you may saturate

your Work Stations with

skilled workers and

modern tools, they can pro-

duce efficiently only when

'community' factors like

traffic control, and ade-

quate lighting, and proper

communications — and

even creature comforts —

are properly integrated."

the integrated office

1 PACKAGE SYSTEMS 2 WINDOW AND CONSOLE UNITS 3 CENTRAL SYSTEMS

ways to air condition older office buildings

by Bernard Eichwald

Eichwald Associates, Consultant Engineers, New York

Any office building, regardless of age, can be fitted with air conditioning—greatly improving working conditions, increasing efficiency and morale. In most cases, however, there is one system which, from the point of view of efficiency and economy, will be better than others for a given location. The type best suited for each office, floor, or building can only be diagnosed by experts who make a complete appraisal of the location (see chart).

In general, the selection of air conditioning can be narrowed down to three basic systems: the air or water-cooled package system; the air-cooled system of window and console room units; and the central system which

usually depends upon piped water and cooling towers for condenser cooling. A fourth type is the well water system, which is the most economical for large rural offices, but impractical in the city.

Package systems

Most air conditioning experts consider package systems the most economical for small buildings, entire floors or suites, or large office areas. Water-cooled package systems range in size from two to twenty-five horsepower. Units up to five h.p. can usually be supplied by existing plumbing facilities, if the building has no cooling tower. For units over five h.p., a cooling tower is necessary. Air-cooled package

units which deliver up to three horsepower of cooling have recently been developed for use in areas such as New York City where water is prohibitive in cost or unavailable for cooling. Package units, both water and air-cooled, supply conditioned air through ductwork, and are usually placed outside of the conditioned space to allow productive use of office space. Package units provide no individual temperature control. Advantages are:

1. Ideal for smaller areas within buildings which do not have central air conditioning systems.
2. Cost less per square foot to install than central systems since less remodeling is necessary. (next page, please)

FACTORS that determine the method you will use

- Amount of **SPACE** to be conditioned — a single office, floor, or entire building.
- Amount of **MONEY** available for equipment and installation.
- Extent of **REMODELING** required for various systems.
- Extent of additional **ELECTRICAL LOAD** which the building could support and cost of additional wiring.
- Availability of **SPACE FOR DUCTWORK** and various types of units.
- Source and availability of **WATER**.
- Sources of outside **AIR**.
- LAYOUT** of the single office, floor, or building to be conditioned.
- Local building **CODES** and zoning regulations.
- LEASE** arrangements between building and tenants.
- CLIMATIC CONDITIONS** characteristic of building's locale.
- Internal **HEAT LOAD** (number of people, lighting, etc.).

Individual console window unit at Gulf Building.





The Standard Oil Company of Ohio, Cleveland, Ohio. Architects: Garfield, Harris, Robinson and Schafer

Sohio transforms garage into modern offices made permanently efficient with Mills Walls

Faced with the necessity of expansion in office space, The Standard Oil Company of Ohio converted a downtown Cleveland garage building into attractive, efficient, modern offices with interiors of Mills Movable Metal Walls. While other remodeling work on the building was in progress the interiors were fabricated at the Mills factory, permitting Sohio to take early occupancy of its new offices.

But the most important advantage of Mills Walls for Sohio is the *space control* they provide. Whenever changes in space requirements occur, these walls can be rearranged to fit new layouts—usually overnight or during a week end, with minimum labor and at very low cost. They promote efficiency by facilitating the most effective use of space at all times.

With this efficient flexibility Mills Walls combine distinctive architec-

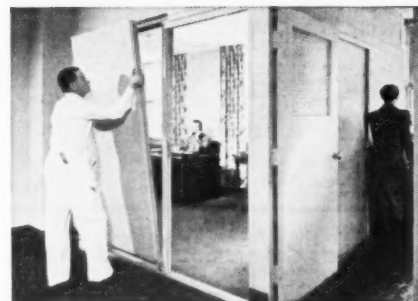
ural design, all-welded panel construction and unexcelled structural stability. They are thoroughly insulated and sound-proofed and have easily accessible raceways for electrical wiring and controls.

As modern and attractive as they are efficient, Mills Walls are available in a wide range of restful colors with baked-on enamel finishes specially treated to eliminate all harsh light reflection. They require no maintenance except occasional washing to keep them looking always their efficient best.

THE MILLS COMPANY
959 Wayside Road, Cleveland 10, Ohio



(Circle 289 for more information)



Mills Walls can often be moved in a matter of hours—without dust, debris, commotion or interruption of normal business routine.

Write for the new 68-page Mills Walls Catalog—it's a practical work book on Space Control.

3. More efficient for large areas than individual room units.

The average cost for installation of the package system in existing buildings is \$4 to \$5 per square foot, though there may be considerable variation depending on individual circumstances.

Window and console room units

By far the easiest to install, and the least expensive system, is the air-cooled room unit, which must be located at the window or other source of outside air. The units require no ductwork or pipes. In some cases, however, ductwork may be added to consoles to carry conditioned air to adjacent offices. These units solve the problem of conditioning individual offices without the expense of either a central or package system, though separate electrical circuits are most often necessary. In sufficient quantity, they may be used to condition whole floors or even entire buildings. One such case, reported in *MANAGEMENT METHODS* (January 1954), was the Gulf Building in Pittsburgh, Pennsylvania, where management decided to install 900 room air conditioners. A central system for this building would have cost between \$1,500,000 and \$2,000,000, while the total cost of window units was around \$300,000. Another factor which weighed in favor of window units was the inability to install a cooling tower for salvaging condenser cooling water. Lack of a cooling system would have greatly increased the operating cost of a central system.

It is important to bear in mind, how-

A window unit in one of the executive offices of the Gulf Building.



ever, that while room units are most economical for certain locations, they may be less efficient and more costly in the long run for others. This must be determined by a thorough survey. Advantages of air-cooled room units are:

1. Economy of operation during intermediate seasons when natural, cool, outside air can be utilized for ventilation.
2. May be moved if office moves.
3. Relatively low maintenance costs.
4. Winter ventilation as desired.
5. Small enough in size so as not to require a licensed operating engineer demanded by many city codes.
6. Eliminates necessity of plumbing, water, and ductwork.
7. Easily adjustable for individual temperature and humidity needs.

Costs for room unit air conditioning have been reported for as low as \$2 and \$3 per square foot.

Central system

When modernization plans call for one system to completely air condition an entire existing structure, a large central-station water chilling plant is often selected. While the initial cost may seem high, it can offer the utmost economy of operation and maintenance in multi-room buildings. Furthermore, such a system has a longer life than the others described, and can be amortized over a longer period of years. This factor should be considered when calculating initial cost.

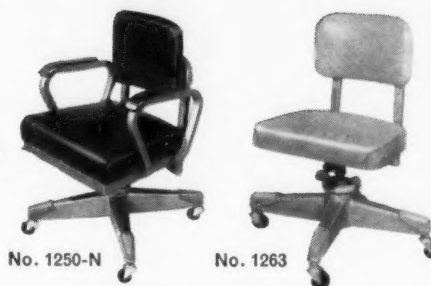
The central unit provides air conditioning for an entire building through one plant, with many individual outlets. All parts of the buildings are supplied with ventilation and circulation of filter-clean air, and each outlet gives individual control of temperature and humidity. The same installation may be utilized for winter heating by circulation of hot instead of chilled water.

This system, however, is not applicable to all type buildings, and when installed, requires extensive construction and alterations. In cases where a building is occupied by many tenants, the cost of a central system is beyond the reach of any one tenant.

The Starks Building of Louisville, the largest office building in Kentucky, was recently fitted with a central sys-

(cont'd page 44)

Extra wide



No. 1250-N

No. 1263

Royal's new, extra wide deep cushioned seats and backrests give luxurious comfort. Rugged, square tubular steel construction is fully welded throughout, for years of dependable service.



No. 1230-N

No. 1277

Handsome

Handsome Royal chairs are available in a number of smart designs and finishes—color co-ordinated to complement any office decorating scheme.



No. 1210



metal furniture since '97

Royal Metal Manufacturing Company

175 N. Michigan Ave., Dept. 33, Chicago 1

Factories: Los Angeles • Michigan City, Ind. • Warren, Pa.
Walden, N.Y. • Galt, Ontario

Showrooms: Chicago • Los Angeles • San Francisco • New York City
Authorized dealers everywhere



No. 1265

office Two part harmony

EXECUTIVE-SECRETARIAL CHAIR COMBINATIONS BY ROYAL

Your secretary will sing (and be much more efficient) in her new Royal Secretarial Chair. You'll hum some yourself when you settle into the luxurious comfort of your Royal Executive Chair. (Comfort, by the way, which keeps you at your business best.) Handsome Royal combinations are available in a number of smart designs and finishes to harmonize with any office decor. And for wear . . . they're without peer. See these Royal pairs at your nearest Royal Dealer or write for literature.

(Circle 307 for more information)



Oak Plankweld® Paneling—President's office, Seneca Textile Division of United Merchants and Manufacturers Inc. Architect: Alfons Bach.

Offices With Dignity and Beauty Choose Weldwood Paneling

Weldwood hardwood paneling brings to the modern office a new but permanent beauty unmatched by any other type of wall covering. It's *functional* as well as *fashionable* because it's easy to maintain and will never need replacement.

COSTS LESS THAN YOU THINK! Modern Weldwood production methods make it possible for you to enjoy the beauty of real wood paneling at a lower initial cost than ever before. This, plus lower upkeep and the elimination of periodic redecorating expenses, should bring the wood paneling you choose well within your budget—you may even show a saving!

EASY TO INSTALL. Standard size 4' x 8' panels are easily installed over furring, with nails or by a new contact cement method. There is a minimum of fuss

and muss. Completely prefinished 4' x 8' panels are also available in some woods. Weldwood Prefinished Plankweld® Panels (16¼" wide x 8' high) are edge grooved and can be installed directly over present wall by a method which completely eliminates face nailing.

CHOICE OF WOOD FACES. Birch, African mahogany, Philippine mahogany, white oak, sliced walnut, knotty pine, elm and Korina® are some of the many Weldwood panels immediately available. Any wood face may be had on order.

LIFETIME GUARANTEE. Weldwood hardwoods are unconditionally *guaranteed for the life of the building.*

Further information is available at any of the 73 United States Plywood or U.S.-Mengel Plywoods showrooms, in principal cities, or mail coupon.


Weldwood®
HARDWOOD PANELING
A product of
**UNITED STATES
PLYWOOD CORPORATION**

(Circle 311 for more information)

United States Plywood Corporation
Weldwood Building, 55 West 44th Street
New York 36, N. Y. MM-3-55
Please send me free literature on Weldwood
Hardwood Paneling.
Name.....
Address.....
City.....State.....



THE MAN

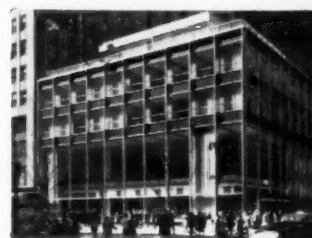
Horace C. Flanigan,
President

THE COMPANY

Manufacturers Trust
Company

THE DESIGNER

Eleanor Le Maire



where the

THE OFFICES

ONE OF THE MOST widely-publicized business structures in recent years is the new Manufacturers Trust Company building in New York. Extremely modern and high-style, it has carried this treatment into the executive offices.

The new building is not the "head office" of Manufacturers Trust. However, since much of company's business encompasses the midtown section in which it is located, Horace Flanigan, President, has an office in the new quarters. Because of the unusual design of the building, it was necessary to maintain a consistent decor. Thus, in the private offices, there is less emphasis than might be expected on individual desires or personality of occupants.

The President's office is used as a reception and conference room for the bank's more important customers. It is located on the fifth floor (executive), and is one unit of a series of connecting offices. It has direct access to the director's lounge, board room, and executive dining room. The office of the secretary, though actually a part of the President's office, is separated from it by two wide corridors leading directly to it.

The treatment and furnishings vary only in color and textures from that throughout the branch. The marble floors are carpeted in a neutral brown. Walls are teak-paneled or a natural colored fabric. Translucent, glass fiber curtains screen the wide window

the work

CEES SUCCESSFUL MEN



used as
room
important
on the
is one
ing of-
to the
n, and
e office
ually a
fice, is
de cor-
ishings
extures
branch.
eted in
e teak-
ed fab-
er cur-
window

areas. The use of leather in up-
holstered furniture is widespread,
with emphasis on natural shades
of brown, bronze, and redwood.
Modern art, in sculpture and
painting, highlight the decor. m/m



thods

march 1955

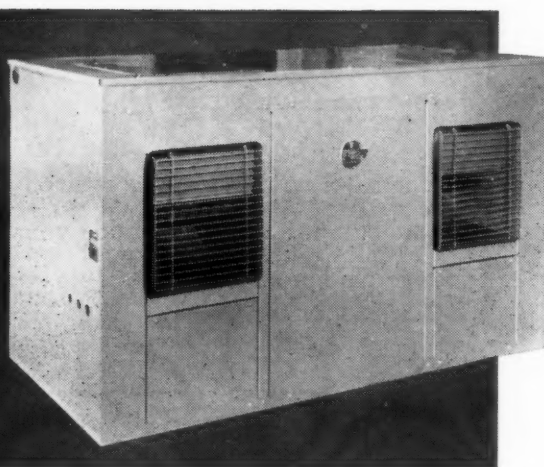
Airtemp Air Conditioning means more efficiency in

OFFICES

NEW

Airtemp Waterless Air Conditioning

COSTS LESS to install • to operate • to maintain



5 H.P. waterless model—one of four models. A size
to suit almost every air conditioning requirement.

Even if you now own air conditioning you should read these facts on Airtemp Waterless (air-cooled) air conditioning. They may save you money.

COSTS LESS TO INSTALL—these new packaged air conditioners don't use even one drop of water so you save on plumbing costs. No cooling tower or evaporative condenser either.

COSTS LESS TO OPERATE—uses only electricity. No water bills to pay. The condenser retains its high efficiency because it's air-cooled.

COSTS LESS TO MAINTAIN—no water to lime the piping or to leak. Maintenance limited to oiling fan motors and cleaning air filters when dirty.

You can forget all about increases in water rates and restrictions on the use of water, too, when you get Airtemp Waterless air conditioning.

This new advancement in air conditioning is built and backed by the world's largest manufacturer of Packaged air conditioning, Airtemp Division of Chrysler Corporation. Call your Airtemp dealer—he's in the Yellow Pages.

Airtemp

DIVISION OF CHRYSLER

AIR CONDITIONING • HEATING FOR HOMES, BUSINESS, INDUSTRY
(Circle 260 for more information)

The only publication
of its kind

the integrated office

a handbook for management on
office remodeling, relocating, building



If you have been thinking about remodeling, moving, enlarging your offices, here's a practical, down-to-earth guide that will save you hours of trial and error planning. This year's issue is crammed full of solutions to management's most pressing problems:

How to select new quarters

How much does it cost to move

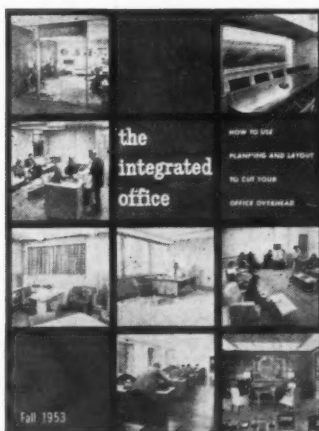
How to modernize on a long-term plan

How much does it cost to redecorate

How to handle sale and lease-back of property

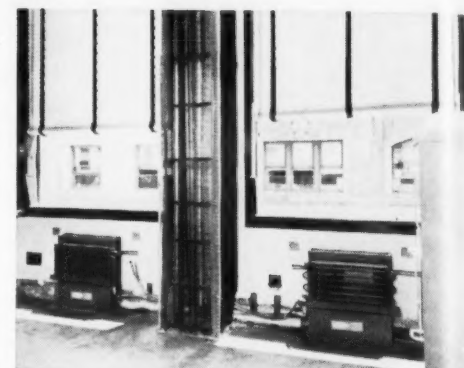
How to expand an existing building

Each of these questions—and this is only a *partial* table of contents—is written by a recognized expert in terms of his experience with well-known firms. Dozens of photographs and plans guide your selection to the proper solution to your needs. To order, use the postage-paid order card bound into this issue. We'll bill you later. **only \$2.00**



A FEW COPIES OF THE 1953 ISSUE STILL AVAILABLE

The 1953 edition of THE INTEGRATED OFFICE covered completely different subject matter. Its general theme was a detailed breakdown of the factors involved in office layout and planning. Together, the two issues provide a complete "package" for the business concerned with office layout, building, furnishing, and renovation. While they last, 1953 copies are available at \$2.00. Use the special order card bound in this issue of MANAGEMENT METHODS.



ABOVE: Units and duct work installed in Starks Building. BELOW: Covering and masonry over units blend with building decor.



tem using high-velocity conduit risers serving under-the-window conditioning units. Two large 600-ton and 400-ton centrifugal refrigerating machines in the sub-basement provide cooling equivalent to the melting of two million pounds of ice every day. The chilled water is circulated to 1,582 room units and to other central system conditioning equipment. Three central system units and cooling towers are located on the roof. The building's 250,000 sq. ft. of rentable area was conditioned at an estimated cost of \$5.25 per square foot for installation. Between \$5 and \$6 is an average cost per sq. ft. for installing central systems.

Air conditioning pays for itself in greater employee comfort and increased efficiency, so it is no longer a luxury. It is a calculated cost which management can absorb as a legitimate expense. m/m

**plan-
ning
idea** Fireproof plant
design reduces
insurance premiums

When planning to build a plant in a rural area, the Bert Mills Corpora-

tion of St. Charles, Illinois, was confronted with limited fire protection facilities and high insurance rates. They, therefore, called in insurance advisors at the initial planning stages of construction.

Now completed, the ultra-modern \$75,000 plant has been called "an object lesson" in fireproof design for other industrial firms planning to build in suburban areas.

Its main safety feature is a single-piece, 40,000 square-foot roof of poured



concrete, supported by concrete columns. Although this type of construction added about 35% to building costs, Mills considered it a worthwhile investment. The move was motivated by General Motors' recent experience when fire destroyed its Michigan automatic transmissions plant. Terrific heat buckled the steel columns, causing the roof to fall in.

Insurance officials advised that fire-wall sections be built between the plant and offices, especially around the paint spray and paint storage areas. The departments were also equipped with automatic sprinkler systems. The firm dug its own water wells to assure a permanent water supply. Two fire hydrants were placed on diagonal corners of the plant, and an employee fire brigade has been trained to go into action the instant fire is discovered.

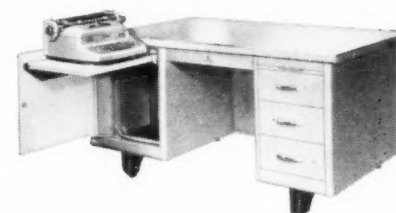
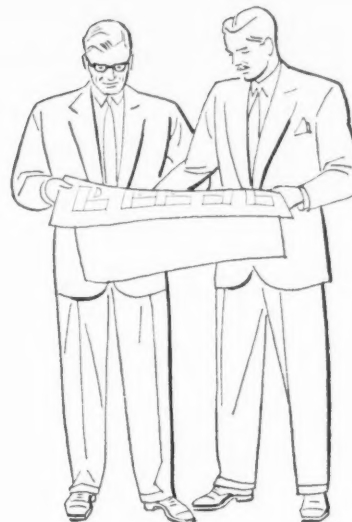
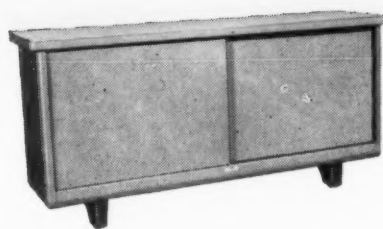
Such careful planning by Mills, and the advice of its insurance advisors, has meant minimum fire insurance premium rates for a factory structure in any rural area.

**plan-
ning
idea**

**1½ acre ceiling
paint job completed
in one weekend**

In a non-stop, weekend marathon, 200 painters put three coats of paint on the one-and-one-half acre, first-floor ceiling of Macy's Westchester store in 38 hours. More than 60,000 square feet of ceiling and 108 columns were covered with a specially-prepared fast-

march 1955



"Correlation" by STEEL AGE—

A Brilliant New Concept in Modern Office Planning!

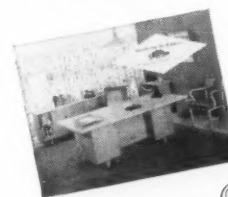
From the very moment it was introduced, *Correlation* by STEEL AGE has been acclaimed as a truly significant advancement in better office planning. And no wonder! For it is the only desk line in America today that combines *all* of these exciting features:

1. Revolutionary, whisper-quiet nylon and Buna-N rubber rollers on all box drawers.
2. Smartly designed, unbreakable fiberglass pontoons.
3. Interchangeable components that allow each unit to grow with changing space and function requirements.
4. A completely *correlated* design, making possible the creation of dozens of multi-unit work areas.
5. Over 50 individual styles and many top materials and attractive finishes to choose from. (Eight typical styles shown above.)

And yet these new *Correlation* units—made to traditional STEEL AGE standards of highest quality

—actually cost less than most conventional steel desk units!

You'll be smart to call your *Steel Age* Dealer about *Correlation* today. For no other desk line can offer you so many features for top efficiency and convenience.



Send For Color Brochure

The complete *Correlation* line is illustrated and described in new full color folder. Write today for your free copy.

Steel Age

The Quality Choice of Modern Offices

CORRY-JAMESTOWN MFG. CORP., CORRY, PA.

Branch Offices: Atlanta • Boston • Chicago • Dallas • Detroit • New York • Oakland • Philadelphia • Seattle
(Circle 265 for more information)



... the harder they fall for the VIP, sumptuous new chair designed by Sturgis for all men in big jobs and big men in all jobs. The VIP is a chair for front offices, where men of importance conduct affairs of importance.

The noble dimensions of seat and back, the lavishness of foam rubber nestling on steel springs are linked in a conspiracy of prestige and comfort. When you own a VIP, it will be for the rest of your business life!

In luxurious combinations of leather or elastic versilan with fine fabrics. Swiveling on either the exclusive Sturgis fiber glass base or the famous Sturgis streamlined metal base. A guest chair to match.



POSTURE CHAIRS

Manufactured in Sturgis, Mich. and Charleston, S. C.
The Sturgis Posture Chair Company, Sturgis, Michigan

THE STURGIS POSTURE CHAIR COMPANY
General Sales Offices, 154 E. Erie St., Chicago 11, Illinois
We'd like a copy of your illustrated folder describing this and other chairs. (3)

Name _____
Firm Name _____
Address _____
City _____ State _____

(Circle 310 for more information)

drying sealing coat, which dries in three hours.

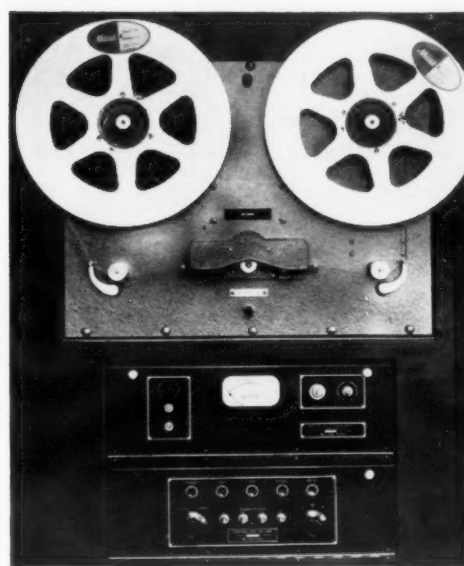
One reason for the non-stop job was purely aesthetic: a continuous expanse of color without any laps or breaks. If painting is stopped, a line usually shows where it was resumed.

**plan-
ning
idea**

**New products
for work center
application**

**New "on location" unit
provides background office music**

An automatic, self-contained, tape trans-



mission unit makes it possible to provide music to offices beyond the service areas of wired line networks. This unit is an extended service of the pioneer background music organization.

For more information, write to Muzak Corporation, 229 Fourth Avenue, New York, N. Y.; or circle number 394 on the Reader Service Card.

Unit clears smoke-filled rooms rapidly

Smoke-filled rooms may be purified in a matter of minutes with a newly developed portable air cleaner. The unit is an electrostatic precipitator, which traps air-borne particles by means of static electricity. Air is drawn into the machine through the bottom, and then is passed over a series of metal plates.

Originally developed for the relief of asthma and hay fever victims, it removes 99% of the pollen in the air. Since the unit is not a filter, it is not limited by the minuteness of the particles. The unit is

**SPEED
OFFICE
MAIL**

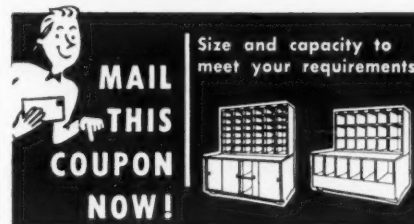
**- cut
labor
costs!**



**Write for
the new** **CORBIN**
**MAIL ROOM and COLLATING
CATALOG**



CORBIN Mail Room and Collating Equipment reduces work motions, ends congestion, handles larger quantities of mail in less time. Used in the majority of U. S. Post Offices, and in leading firms, universities and institutions. It's the answer to your need for fast, efficient mail handling!



CORBIN Wood Products Division,
(Dept. MB)
The American Hardware Corporation
Hornell, N. Y.

Send illustrated literature and prices on Corbin Mail Room and Collating Equipment and related products.

NAME _____
FIRM _____
CITY _____ **ZONE** _____
STATE _____

(Circle 253 for more information)

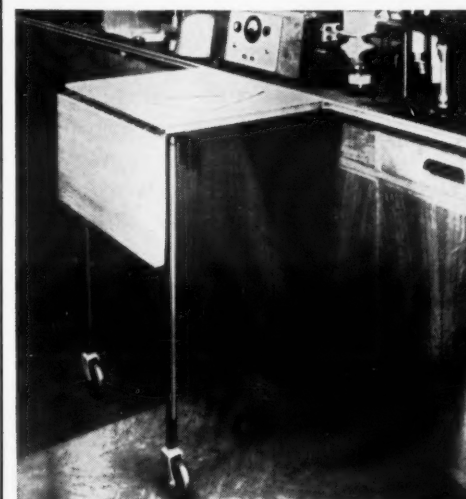


30" x 15", and no installation is required.

For more information, write to the Raytheon Manufacturing Co., Waltham, Mass.; or circle number 379 on the Reader Service Card.

Mobile bench unit multiplies laboratory working space

A new mobile bench unit solves many laboratory space problems. It rolls along a laboratory bench on guide rails, adding five square feet of extra working space. Easily attached to the bench, the unit locks into any position, and may be rolled along to wherever it's needed. The surface measures 18" x 24" and extends to



24" x 30" when the flap is raised, and leg height is adjustable from 28" to 38".

For more information, write to Palo Laboratories, Inc., 81 Reade Street, New York, N. Y.; or circle number 385 on the Reader Service Card.

<p>FOR MORE INFORMATION on products or methods described in this issue CIRCLE THE KEY NO. and mail this card</p>	<p>USE READER SERVICE CARD</p>
--	---------------------------------------

Also send information on _____
Name _____
Title _____
Company _____
City _____ Zone _____ State _____
No. Employees in Firm _____



SENSATIONAL! SIGHT LIGHT...

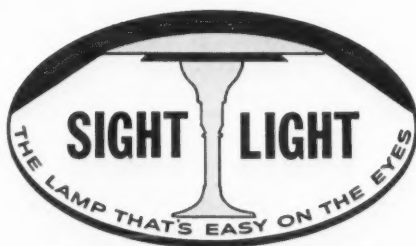
The Lamp That's
Easy on the Eyes

- Different "Seeing tasks" in the office demand different lighting accommodations. The desk worker of 50 may require twice as much light as his co-worker of 30 performing the same task. Also, two desk workers in the same department, one peering over fine printed matter, the other handling written business forms, need two entirely different levels of illumination. The first worker obviously needs the benefit of supplementary lighting.

- Sight Light is the perfect supplementary light for use in conjunction with overhead lighting.

- The accuracy and efficiency of the modern office depends on "Seeing Comfort." Only from Sight Light can you obtain the benefits of glareless, shadowless light. Type is clearer, figures sharper, reading so easier!

- Illustrated is Swivel Arm. Turns 360°, wafer-thin base never in the way. Latest decorator colors.



M. G. WHEELER COMPANY
GREENWICH, CONNECTICUT
(Circle 332 for more information)

"worth

Quality control in our changing times:

Companies applying radioisotopes to quality control or other production operations are saving both money and materials, according to Edwin A. Wiggin, technical assistant to the chief of the isotopes division, U. S. Atomic Energy Commission. For example, the Carborundum Company, using radioactive thickness gages in the production of coated abrasives to measure the thickness of materials and final product, expects to save enough money on rejects and shutdowns in a few months to pay for the gages. Industry is also using radioisotopes for marking-tracing the location and/or movement of a particular object or specific batch of material. A third general category of radioisotope applications is to study wear. California Research Corporation, using the radioisotope method to determine the wear of piston rings with various lubricants, estimates it has been able to carry out in four years, at a cost of \$35,000, a test program that would have required 60 years and cost a million dollars by the method formerly used.

”

Sales and market research: "The necessity for carefully conceived and expertly directed market research will be increasingly evident in the months ahead. In conducting such research, you can proceed on the basis that the consumer has purchasing power and that he is willing to spend it. The basic question is when will he spend it and at what rate. Top priority in merchandising today must be given to selling techniques and selling ability and to customer service. Neither of these subjects can be given their well-merited attention unless you have the facts, derived from scientific study of marketing problems, scientific accumulation of data and scientific evaluation of data. Then, and only then, can you put market research to work for you, and make it function as one of the most valuable management tools in your business." Don G. Mitchell, Chairman of the Board, Sylvania Electric Products, Inc.

repeating"



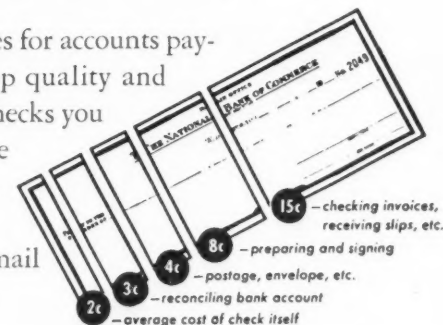
LOOK TWICE at your check-preparation costs

In a recent survey, The Todd Company found that it costs the average business 32¢ to write a check. The diagram below shows how these costs are distributed.

The biggest cost factors—accounting for 26 of the 32 cents—are the time and money consumed in checking invoices, preparing and signing, reconciling the bank balance.

With Todd procedures for accounts payable, you not only get top quality and guaranteed safety in the checks you use, but Todd analysts give dozens of time-saving suggestions and short cuts.

To get all the facts, mail the coupon below.



ROCHESTER NEW YORK
SALES OFFICES IN PRINCIPAL CITIES
DISTRIBUTORS THROUGHOUT THE WORLD

THE TODD COMPANY, Inc., Dept. MM
Rochester 3, N. Y.

Please send full details on the Todd Procedures for Accounts Payable.

Name of Firm _____

City _____ Zone _____ State _____

Telephone _____

By _____

MM-3-55

(Circle 326 for more information)

CALCULAGRAPH

keep tabs
on costs



-with
ACCURATE
job time
records

CALCULAGRAPH

figures elapsed time accurately

Reliable job time records are essential for compiling correct cost data, estimating reorders and checking on production efficiency. One sure way to secure accurate to the minute, dependable time costs is to use Calculagraph automatically-figured elapsed time records. Calculagraph gives you total elapsed time, starting and finishing time and date on a permanent, printed reference card. Eliminate losses due to inaccurate job time calculations by using Calculagraph to time your operations.



Agents in Principal Cities
Ask for a Demonstration
Call or Write Dept. 310



CALCULAGRAPH COMPANY
SUSSEX STREET, HARRISON, NEW JERSEY

(Circle 258 for more information)

SUMMER JOBS

screen students for
permanent positions



Searching for new talent for possible executive and professional positions, an Ohio pharmaceutical concern, the Wm. S. Merrell Company started a student summer employment program. Both management and the personnel staff felt that a better screening method was needed to aid in selecting college applicants applying for positions with the firm.

The plan was modeled after their Executive Development Training Program. Each student gains a working knowledge of the department in which he is employed, as well as learning its relation to other operational areas.

Each student is carefully selected from colleges in all parts of the United States. The qualifications are the same as those used in hiring permanent employees. The student must show evidence of good *idea-output*. If the desired qualifications are fulfilled, he is then brought to Cincinnati for multiple interviews with company executives.

At the end of the summer, each student is carefully appraised by his supervisors. The appraisal is made on the basis of progress and development over the three-month period the student has worked. They are also graded on a master grading sheet. This same sheet is used in appraising performance of permanent employees.

Both the student and the company have a chance to look one another over during this trial period. The program allows a student to develop business ability, ideas, and leadership qualities. The company has an opportunity to see exactly how or what he can actually do on a job before he is hired permanently. Although the program was started only two years ago, the Merrell Company is more than satisfied with results.

During the first year, students were hired to work, in selected areas of the country, with members of the sales force only. They were mainly pre-medical students. In the following summer, students were employed in the marketing, production, and medical research divisions. Plans for 1955 call for an increase in the number of students that will be hired. m/m

For Fast,
Sure, Clean
Sealing and
Moistening...



Use the PIKE "BETTER MOISTENER"

For sealing envelopes—for sticking stamps and labels—put a PIKE "Better Moistener" on every desk in your mailing department and shipping room! They're self-cleaning—last for years. Broad weighted base prevents tipping. Feet are concealed and rubber-padded—no *scratching!*

Attractively styled, in finishes to match every office decor. Sparkling chrome cover, with bases of black, gray or brown porcelain—or cast iron with black or gray wrinkle finish.

Model 3A—Porcelain base. Black, gray or brown. List price \$3.95. Model 3C—Cast iron base. Black, steel gray wrinkle finish. List price \$4.50.

Both with 3" adjustable brushes. Extra brushes \$1.32. See your stationery dealer

or mail or phone your order direct to

E. W. PIKE & CO., INC.

494 NORTH AVENUE

ELIZABETH 3, N. J.

ELizabeth 2-9630

(Circle 328 for more information)



If you want
more information

✓ On any product or service described in MANAGEMENT METHODS, just circle the key number on the postage paid Reader Service Card bound into this issue and fill in your name, address, etc. If an item has no key number, merely state the subject matter in the space provided on the card.



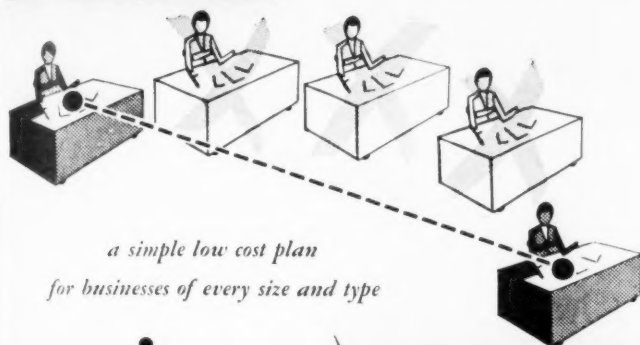
efficiency goes up...
costs come down!

...with

LeFebure

SHORT CUT

BOOKKEEPING



a simple low cost plan
for businesses of every size and type

POSTING IS DONE ONLY
ONCE EACH MONTH.

EASY TO POST—AND
EASY TO PROVE.

EVERY CHARGE VERIFIED
BY WRITTEN RECORD.

COMPLETE ACCOUNT
RECORDS IN ONE PLACE.

CAN PROVIDE DUPLICATE
COPIES FOR SECURITY.

BETTER BUSINESS RELATIONS

simplicity...

speed...

economy...

they go
hand in hand!

the plan makes it practical...

LeFebure equipment makes it profitable!

WRITE FOR
COMPLETE...

LeFebure
CORPORATION

CEDAR RAPIDS, IOWA

Please send complete
information on SHORT CUT BOOKKEEPING

NAME

FIRM NAME

ADDRESS

CITY

STATE

Dept. M-1

(Circle 283 for more information)



...CATALOG OF PLAN

Permanent building veneer of "sprayed-on" plastic



BEFORE

AFTER

The outside walls of the recently completed 15-story Carlton Hotel in Tyler, Texas, look like the smooth, finished walls of a modern living room. This effect was obtained by spraying-on a plastic finish, instead of using any of the conventional veneer materials.

Although less than .035 inches thick, this flexible, non-combustible plastic skin is weather-proof, and is impervious to the effects of mildew, acids, and petroleum solvents. It is sprayed directly onto the concrete, and forms a continuous, jointless sheeting. The concrete, itself, is preserved, according to the manufacturer, because the plastic skin creates a curing condition for concrete by sealing it.

Simplified construction effects savings

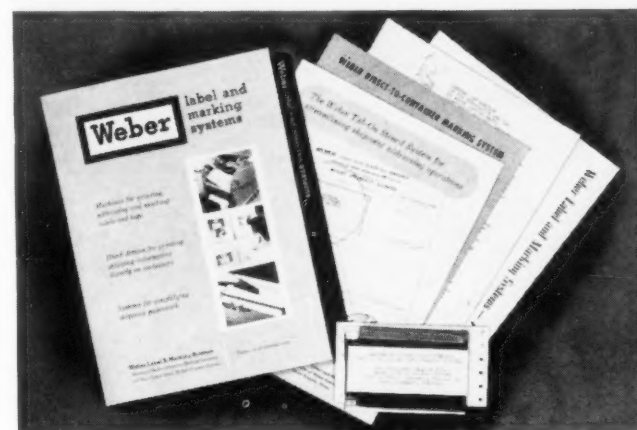
A substantial savings was made in the hotel's construction because of the tremendous simplification of exterior detailing and foundation construction. Ordinary veneer, like brick or metal sheeting, has to be supported by shelf angles, and adds weight to the structure. This, of course, means higher costs in the building's foundation and frame.

The average cost of material and labor for the plastic covering is 40c per square foot of surface. This veneer might be considered a permanent material. Only three to four maintenance treatments are required during the normal life span of a building, which consists of injecting plasticiser into the sheeting by covering it with a new top layer. Otherwise, the only maintenance required consists of simply washing the surface.

For more information, circle number 395 on the Reader Service Card.

This "free" file-folder kit
will show you...

How to simplify your shipping paperwork



NOTHING LIKE IT EVER BEFORE! Not a catalog of products, but a file folder of systems created to streamline shipment addressing and marking, and simplify shipping paperwork.

Cost-conscious firms have discovered that the key to efficient shipping and packaging operation is a fast, low-cost system for addressing and marking containers. That's exactly what this File-Folder Kit is about.

Described and illustrated are systems that make shipment addressing and product identification marking faster, cheaper and more accurate. You'll see how addressing operations can be tied-in with the preparation of shipping paperwork, and how the entire chain of events leading to the addressing and marking of your shipments can be streamlined. And there are also product samples that you can try out!

Never before has so much factual information been offered on this important subject—and it's all yours without charge or obligation. Make sure you get your Weber Label and Marking Systems File-Folder Kit right away!

Weber

label and marking systems

Division of Weber Addressing Machine Co.
Mount Prospect, Illinois
Phone: CLearbrook 3-2405

Weber Label and Marking Systems
Dept. 9C, Mount Prospect, Ill.

☐ Please send me a Label and Marking Systems File-Folder Kit.
☐ Also, we would like to talk to your representative as soon as possible about improving our shipment addressing and marking operations, and simplifying our paperwork.

Company

Individual Title

Address

City Zone State

(Circle 315 for more information)

HOW TO FIND THE FACTS

...when you want them



VICTOR BOOK VISIBLE

Nothing adds so much to your own personal efficiency as having **all** the facts in any record at your fingertips. With Victor Book Visible up to 118 record items can be reviewed at a glance. No matter what the record, Book Visible gives you surer, faster control... saves you time and money. See it at your stationer's today!

VICTOR SECTIONAL VISIBLE

Every advantage of Book Visible is combined with the capacity to grow, section by section, in Victor Sectional Visible. Sections stack rigidly to any convenient height. You buy only what you need **when** you need it. Ask your stationer for a demonstration.

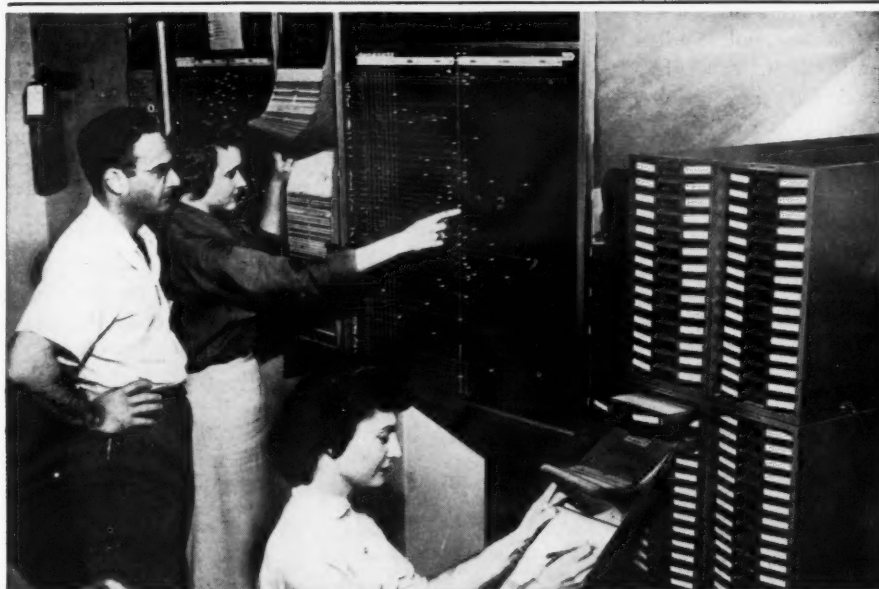


VICTOR SAFE & EQUIPMENT PRODUCTS

Remington Rand

315 Fourth Ave., New York 10, N. Y.

(Circle 312 for more information)



Wassell Controls at work at Dee Brass Foundry, Houston, Texas

"... SigNaLok Cabinets... control our customer's patterns and our raw material purchases. Our Produc-Trol Boards give us a visual picture of the status of each customer order... from the receipt... to final delivery."

Using these same tools, management in 15,000 other companies maintains effective, at-a-glance control of production, inventory, sales, and hundreds of other varied operations.

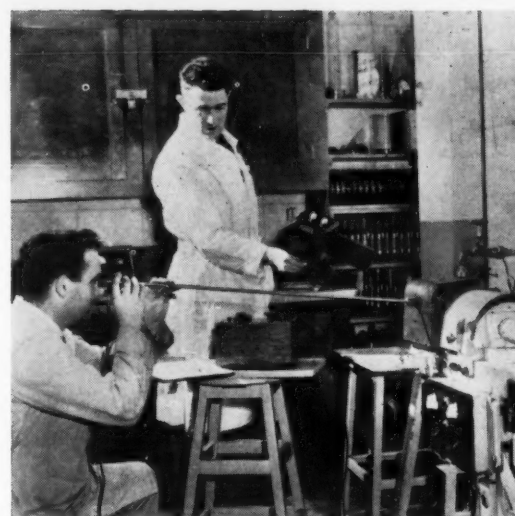
WASSELL ORGANIZATION, INC.

Westport... Conn.

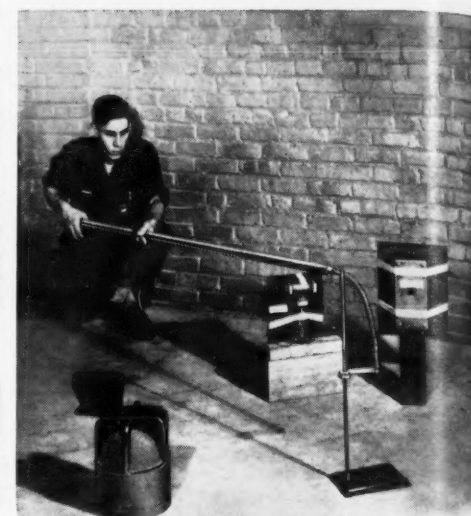
I want to know how Produc-Trol and SigNaLok can help us in.....

Name.....
Title.....
Company.....
Address.....
City.....Zone.....State.....

(Circle 325 for more information)



LEFT: Two scientists conduct a gear wear testing project. By making an ordinary metal gear radioactive and using a geiger counter, wear testing can be accomplished in a few hours. **RIGHT:** A radiographer, using a Co-60 source, produces a radiograph which will show internal flaws of the object filmed. Equivalent to a 2,000,000 volt X-ray unit, the Co-60 source costs much less and is highly portable.



Using isotopes

Though most businessmen are thoroughly familiar with the phrase, "peacetime use of atomic energy," few relate the subject to their own operations. The potential uses for radioactive isotopes are seemingly limitless. Moreover, the cost is so low that it is well within the means of even the smallest firm.

For example, today \$280 worth of radioactive cobalt will do the work of \$10,000 worth of radium or will replace costly X-ray techniques. Radioisotopes are now used to "shine" rays through metal onto a film so that a flaw in a casting can be detected before it is machined. The same technique can be used to detect a weak point in a weld. By the same token, to find a leak in a pipeline, a technician need only run a millicurie of radioactive iodine through the system. The leak can be located with a Geiger counter in 15 or 20 minutes.

How much training is needed?

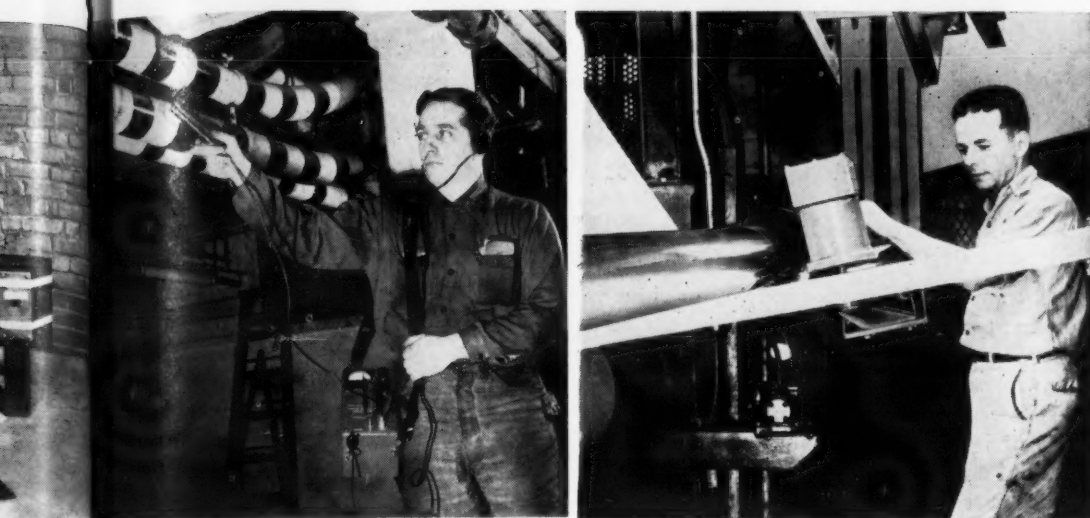
In spite of the fact that the field is new, there are already about 80 servicing laboratories throughout the country offering expert advice on the many uses of radioisotopes. Their technicians will perform all the handling of equip-

ment necessary. They'll help you develop applications. However, because of the many new uses that are developing and the relatively low cost involved, it is becoming increasingly advisable for companies to have their own trained personnel on the job as much as possible.

One firm, Tracerlab, Inc., of Boston, a pioneer firm in finding industrial uses for nuclear energy, has been giving informal training to workers of firms wishing to install equipment for using radioactivity. Recently this firm set up a curriculum designed to train personnel in the use of radioisotopes and to turn out radiographers in three days! A firm enrolled three or four of its employees in the new training program at a comparatively small group fee which includes manuals and charts to guide the trainees after they've become operators. A trainee should have a basic knowledge of college chemistry and physics or the equivalent practical experience. Anyone with previous X-ray experience is ideally equipped. Ingenuity is highly desirable, for new radioisotope uses turn up every day.

Contrary to common belief, there is little danger to the personnel using radioactive materials. To offset misap-

methods



LEFT: By tagging mail carriers with Co-60, they can easily be located by a geiger counter, if lost or lodged in a pneumatic tube. **RIGHT:** Thickness of fine papers can be measured by a beta gauge, which emits beta rays through a moving sheet of paper to a detecting device. The number of rays that can pass through determine thickness. The beta gauge is an extremely sensitive thickness device and has no speed limitations.

for business

prehension among employees, however, Tracerlab recommends that no secret or mystery be made of the fact that radioactivity is being used at a plant. The subject should be explained in discussions and bulletins at every opportunity without making a big thing of it. There's no contamination problem. Although no one but trained nuclear scientists are permitted to handle radioactive material itself, your workers can be trained to make use of it in the protective containers in which it is supplied.

As an added safety factor, Tracerlab and a number of other companies have a "film badge service" to which firms may subscribe. Four badges of different colors, bearing the worker's name and number, are issued. A different badge is worn by the worker each week while the one worn the previous week is mailed to the laboratory for evaluation. If a subscriber wishes, the laboratory will notify him by wire should a film on any badge indicate that the wearer's dosage is nearing the limit of safety.

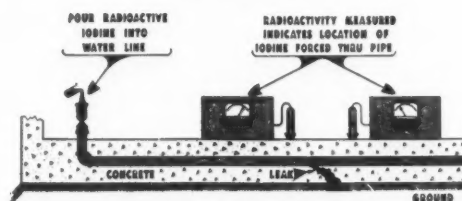
How much does it cost?

It costs about \$1,000 to equip a company for radiographic work. More and

more workers are learning to handle radioisotopes every day since the training is fast and inexpensive. It is no more dangerous to operate this invaluable tool than it is to handle a blowtorch or high-voltage electricity. Since isotopes used for radiography lasts from 5 to 33 years, servicing isn't usually necessary.

No special installations are necessary either, but if radiography is carried on frequently, it is a good idea to use a remote room free from traffic and apart from other workers, preferably with two outer walls. Any place not readily accessible will do for storing isotopes in their lead containers, though they should be well marked and locked. m/m

DETECTING LEAKS IN INDUSTRIAL EQUIPMENT



Radioactive iodine is used to detect leak in a water line. It is not necessary to remove floors, and because of the short half-life, there is no residual activity.

Learn about Amazing New Office Space Stretcher

EXTRA Seating and Table Space at a Moment's Notice

The new Clarin Tablet Arm Chair that folds combines table and chair in one. You'll be amazed at how many people you can seat comfortably in a small office—and give each of them table space as well. Thus, you can hold those important group meetings in almost any office—and arrange it in a few moments. This space-saving chair is quality built—gives years of service—folds flat to 3-inch depth for fast, safe stacking in a minimum of space. Foam rubber cushioning if desired.



FOLDS FLAT IN 3 EASY STEPS



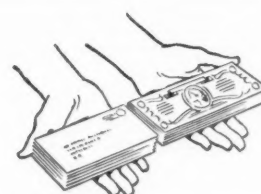
Write for full information:
Clarin Mfg. Co., Dept. 47,
4640 W. Harrison St.
Chicago 44, Illinois

Clarin

There is a Clarin Steel Folding Chair for your every need.
New FREE Catalog of complete line on request.

ENGINEERED QUALITY MAKES THE BIG DIFFERENCE IN FOLDING CHAIRS

(Circle 261 for more information)



Weigh the consequences!

If your mailing scale *overweighs*, you *overpay*. On just 12 letters daily, this may cost you an extra \$90 a year. If your scale *underweighs*, you *underpay*. Result: "Postage dues" that delay your mail and breed customer ill will.

You can be sure of getting your postage money's worth with a Pitney-Bowes precision scale. Its automatic pendulum action offers the utmost in accuracy. And the large legible figures and widely-spaced graduation lines, so easy to read, eliminate eye error and guesswork... save postage dollars and protect good will. Other models for parcel post up to 70 lbs. Ask the nearest PB office to demonstrate, or write for free illustrated booklet.

FREE: Handy chart of Postal Rates
with parcel post map and zone finder.

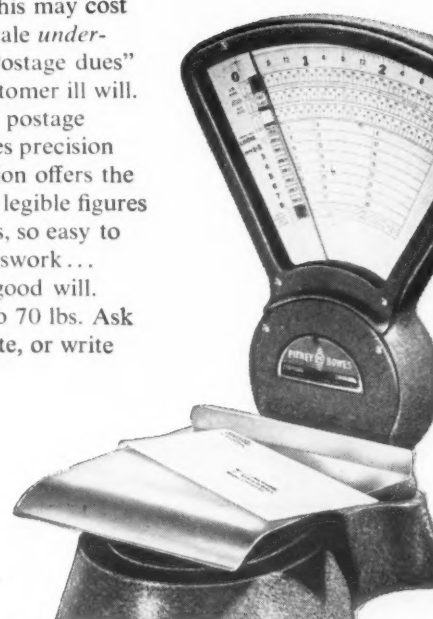


PITNEY-BOWES Mailing Scales

PITNEY-BOWES, INC.
4575 Walnut St., Stamford, Conn.

Originators of the postage meter
... offices in 94 cities.

(Circle 299 for more information)



IT'S FREE AND IT'S PACKED WITH
IDEAS THAT SHOW HOW COLITHO
OFFSET DUPLICATING PLATES
CAN STREAMLINE YOUR
BUSINESS PAPER-
WORK



Clip this coupon
and mail with your
letterhead for
your FREE copy of
the Colitho Idea
Folio.

Colitho

THE "ONE-WRITE" WAY TO RUN A BUSINESS

Colitho Division, COLUMBIA RIBBON AND CARBON MFG. CO., Inc.
493 Herb Hill Road, Glen Cove, N. Y.

Send me the Folio of Colitho Application Ideas.

Name _____
Company _____
Address _____
City _____ Zone _____ State _____

(Circle 262 for more information)

clippings

NEW LITERATURE AND PRODUCTS IN THE EDITOR'S MAIL

Machine makes dry copies without negatives or liquids

A completely new, dry copying machine makes error-proof, dry copies in about four seconds from printed, written, or drawn originals. The original may be transparent or opaque, printed on one side or both, and any color.

The machine employs a special light which acts upon a special copying paper. With no liquids, negatives, or master copies involved, it copies directly from the



new mimeograph inks which dry on contact with the paper. All operating controls are clearly identified, and complete operating instructions are on permanently attached metal decals.

Multi-color duplicating is simplified because two ink pads can be used at one time on this machine. The black inked pad is covered with a sheet of pliofilm, and a clean second pad can then be added for the color inks.

For more information, write to A. B. Dick Company, 5700 W. Touhy, Chicago, Ill.; or circle number 388 on the Reader Service Card.



New metal loose-leaf binder for office binding needs

A new, metal, loose-leaf binder enables a duplicating department to bind anything

original in one step. It operates in any open area, regardless of lighting conditions. Only a few minutes of instructions are needed. It is 17" wide x 17" long x 9" high, and uses 110-volt AC current.

To make a copy, the operator places a sheet of copying paper on top of the original, and inserts both into a slot in the front of the machine. The paper is carried automatically through the machine. It passes the special light and returns to the operator within four seconds, ready for immediate use.

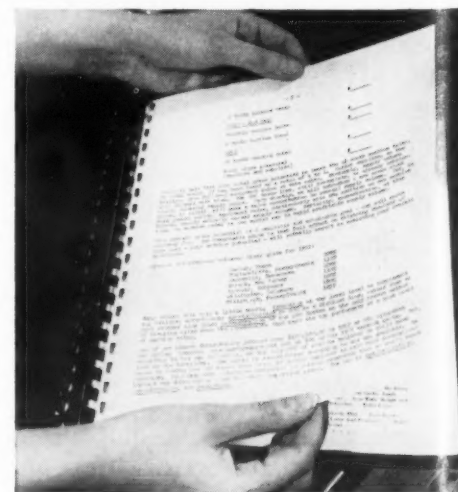
For more information, write to Minnesota Mining and Manufacturing Company, Dept. G5-38, 900 Fauquier Street, St. Paul, Minn.; or circle number 380 on the Reader Service Card.



Low-cost mimeograph features dry inks and color duplicating

A new, low-cost, electric mimeograph features a full ream feed, an enclosed cylinder, hairline registration, variable speeds from 90 to 180 copies per minute, and a new dual roll feed that may be set to eliminate paper lint on copy areas or to avoid smearing pre-printed copy.

The enclosed cylinder permits use of



duplicated, printed, typed, or drawn, in either plastic or metal bindings. Standard-spaced punching permits the interchange. Pages may be inserted or removed anyplace in the book without taking the book apart. The metal loose-leaf binder will find its chief use wherever frequent page-changes are necessary.

The new binder is available in two basic wrap-around cover styles in a variety of colors. The covers, one a sturdy flexible plastic which is electronically sealed, and the other, a low-cost, serviceable imitation leather, can be imprinted or otherwise designed to suit the user's needs.

For more information, write to the General Binding Corporation, 812 W. Belmont Avenue, Chicago, Ill.; or circle number 378 on the Reader Service Card.



Book of simplified tables for computing depreciation

Since the Internal Revenue Code of 1954 revised the regulations for reporting depreciation for tax purposes, accountants

have a choice of method in computing depreciation of assets. After choosing one of the three methods, determining the final percentage to be applied to each asset involves complex calculation. A new book of simplified tables for use with the Sum-of-the-Year's-Digits method eliminates the tedious work of figuring depreciation for each asset.

6 YEAR LIFE								
Year	Month Placed in Use							
	1st	2nd	3rd	4th	5th	6th	7th	8th
1	28.57%	26.19%	23.81%	21.43%	19.05%	16.67%	14.28%	11.90%
2	23.81	24.21	24.60	25.00	25.39	25.79	26.19	26.58
3	19.05	19.45	19.84	20.24	20.64	21.03	21.43	21.83
4	14.29	14.69	15.08	15.48	15.88	16.27	16.67	17.07
5	9.52	9.92	10.31	10.71	11.11	11.51	11.91	12.31
6	4.76	5.15	5.56	5.95	6.35	6.74	7.14	7.54
7	---	---	---	---	---	---	---	---

The tables show 17 different depreciation years from 3 to 50. After selecting the proper length of life, all that is necessary is to find the month placed in use, and apply the percentage shown to the asset cost for each year. The use of this book saves many hours otherwise needed by auditors and accounting personnel.

For more information, write to Walter Camenisch, Inc., 1501 Race Street, Philadelphia, Pa.; or circle number 390 on the Reader Service Card.

New complete catalog of tabulating equipment accessories

A new catalog details complete accessory equipment for all tabulating operations. The catalog contains illustrations, specifications, and full descriptions, including prices.

The following categories are covered: binders, desks, control panel cabinets, files, guides, racks, table-top trucks, card trays, and tub file equipment.

For a free copy of this catalog, write to Tab Products Company, 57 Post Street, San Francisco, Calif.; or circle number 392 on the Reader Service Card.



"Glider" blue print rack offers new filing system

A new "glider" blue print rack has created considerable economies in the filing and finding of blue prints.

The rack systematically files blue prints in index form. It stands 5 feet high, 4 feet wide, and 3 feet deep, and comes

NEW Master Paper for Direct Copying Machines

gives you the clearest, sharpest copies yet!



EAGLE-A TRANSLUCENT BOND

Ideal master paper for Bruning, Oxalid, Pease and other direct-print machines. With Eagle-A Translucent Bond as your original sheet, you can get better copying results every time. The improved translucency of this new master paper gives you cleaner, unclouded copies of records and forms.

High in quality, low in cost! Made of selected fibers, Eagle-A Translucent Bond has a smooth surface excellent for writing, typing or printing . . . and strong durability. You'll want to test its quality, compare its low cost. Available through Eagle-A distributors.



By the makers of Coupon Bond and other Eagle-A Business Papers

Free test packet

Clip this coupon to your letterhead

AMERICAN WRITING PAPER CORPORATION
HOLYOKE, MASS., DEPT. M

Send FREE packet of Eagle-A Translucent Bond with printed samples and blank test sheets:

NAME _____

TITLE _____

(Circle 329 for more information)

AMERICAN PRESENTS

123 1234 456 123456 9

1624 12345 10- 123 45

THE ALL-AMERICAN LINE FOR 1955

WRITE FOR FULL DETAILS

1235 12345 251945 5432

AMERICAN NUMBERING MACHINE CO, BROOKLYN 8, N.Y.

(Circle 254 for more information)

Binders for Management METHODS

Here's a specially designed binder that will hold 12 issues of Management METHODS without crowding. Looseleaf, pages open flat, with no part of the gutter of a page hidden from view. The maroon, leather-like hard cover allows volumes to be stored "on end" in your bookcase.



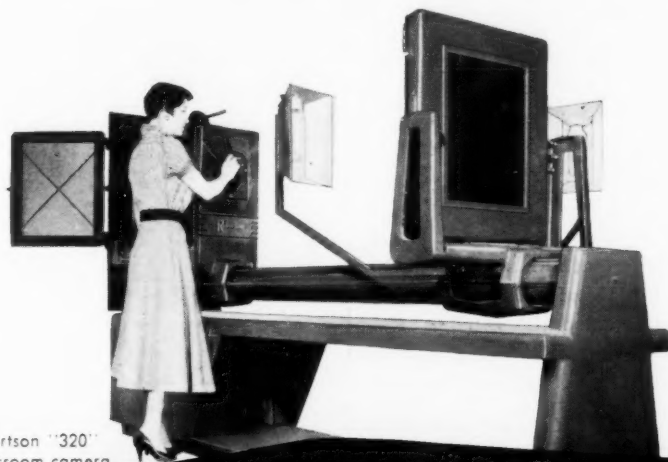
Single binder price is \$3.95, postpaid. Or, if you have back issues on hand, save a dollar by ordering two for only \$6.95, postpaid.

Check or money order must accompany your order to:

Spartan

STATIONERS, INC.

141 East 44th St., New York 17, N. Y.



The Robertson "320" 16x20" darkroom camera

Get more from your copying equipment
with a ROBERTSON all-purpose CAMERA

broaden the use of these reproduction methods

Only the flexibility of a ROBERTSON camera gives you all these advantages

Reproduce drawings, illustrations and pictures for most types of duplicating

Cut negative and preparation costs approximately in half

Produce your own house organs, sales bulletins, advertising, etc., with ordinary office duplicators

Copy original art work, tracings, blue prints, etc., up to twice size, and reduce down to 1/5 size

Make halftones using either contact or glass screens

Give your copying, reproduction and duplication equipment a versatility not possible with any other camera

- ★ Offset Duplicating
- ★ Xerography
- ★ Process Color Work
- ★ Photo Copying
- ★ Enlarging—Reducing
- ★ Blue Print Copying
- ★ Silk Screen Processing
- ★ Mimeographing

FREE

Send now for your free copy of the "320" Manual of Operation, an illustrated booklet that shows how anyone can easily operate the "320" camera. No obligation.

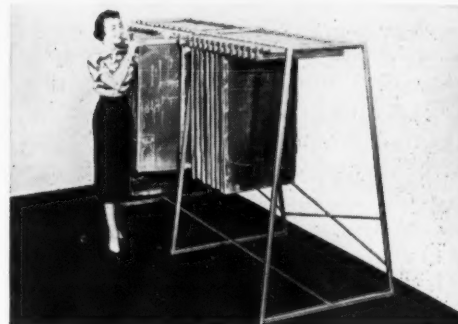
Robertson
PHOTO-MECHANIX

A complete line of photomechanical equipment

ROBERTSON PHOTO-MECHANIX, INC.

3073 ELSTON AVENUE • CHICAGO 18, ILLINOIS

(Circle 333 for more information)



equipped with 12 plan holders. Extensions are available wherever more filing space is required. Each unit and each extension can hold as many as 1500 blue prints individually.

The holders are desirable because they do not require hole punching of prints. Each one holds from one to 100 prints. The individual prints or sets of prints are merely slipped into the holder and tightened into place by a very simple thumb screw operation.

For more information, write to the Momar Industries, 4323 West 32nd Street, Chicago, Ill.; or circle number 386 on the Reader Service Card.



Free trial bottle of duplicating ink remover

A specially formulated ink remover can be tested without cost or obligation. Available in cream or liquid, and pleasantly scented, the remover is simply rubbed on ink-stained hands and rinsed off. It performs with equal ease in removing stamp pad, carbon, and other ink stains.

For a free trial bottle of this ink remover, write to The Heyer Corporation, 1832 S. Kostner Ave., Chicago, Ill.; or circle number 384 on the Reader Service Card.



New booklet shows varied uses of textured vinyl covering

Many interesting decorating ideas using textured vinyl wall and furniture covering are illustrated in full color in a new booklet. The 12-page booklet describes the unusual properties of the covering, and includes a sample swatch.

For a copy of the booklet, write to L. E. Carpenter & Company, Inc., Empire State Building, New York, N. Y.; or circle number 387 on the Reader Service Card.

handle papers faster
with
SORTKWIK



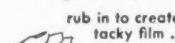
no more clumsy
rubber fingers

apply between
fingers and thumb ..

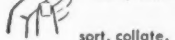
or



messy sponges



Easy to apply, SORTKWIK creates a greaseless, stainless, tacky film permitting handling more papers much faster.



sort, collate,
count, file

Now widely used in a variety of businesses throughout the country, SORTKWIK is setting a new standard for efficient and speedy paper handling.

Order a supply from your stationer TODAY! Or send ONE DOLLAR (\$1.00) for two regular size containers to try out.

Average 4 months
supply

50¢



LEE PRODUCTS CO.

2738 Lyndale Ave. S. Minneapolis, Minn.

(Circle 321 for more information)



RITE-LINE COPYHOLDER

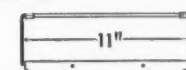
Promotes Accuracy - Increases Production

PRICE INCLUDING
NEW TELESCOPIC
EYEGUIDE

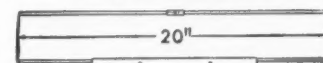
\$17.75
PLUS TAX

TELESCOPIC EYEGUIDE

Accommodates all widths of copy from a machine tape to 20 inches.



EYEGUIDE CONTRACTED



EYEGUIDE EXTENDED

FREE TRIAL OFFER Write, asking us to send you a RITE-LINE Copyholder with the understanding you may return it without charge within ten days.

RITE-LINE CORP. 4209 39th Street, N.W. Washington 16, D. C.

(Circle 306 for more information)

methods

HAVE YOU HEARD ABOUT . . . HAVE YOU SEEN CONVOY "Chem-Board"*

RIGID, PERMANENT, INEXPENSIVE



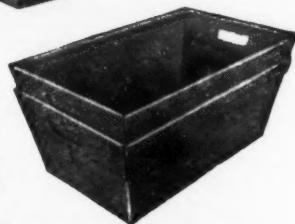
record storage FILES

Chem Board storage Files are permanent. They cost and weigh about 50% less than steel; cost less than some corrugated paper files. They're shipped assembled, ready for use.

*CHEM-BOARD is the product of Convoys chemical impregnating process that makes corrugated board flint hard, rock strong.

CONVOY

also makes a complete line of Tote Boxes, used by famous names in all types of industry.

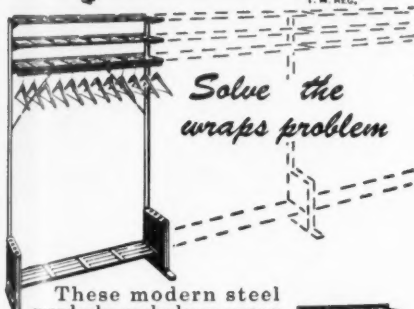


WRITE FOR COMPLETE INFORMATION
CONVOY, INC.

P.O. Station B, Box 216-M
Canton 6, Ohio

(Circle 264 for more information)

The OFFICE VALET



Solve the
wraps problem

These modern steel wardrobe racks keep wraps aired, dry and "in press". End crowding of coats and hats in damp lockers or cabinets. Save floor space too—provide ventilated hat space, coat hanger (spaced apart from all others), built-in umbrella stand and overshoe shelf for 3 persons per sq. ft. 4 ft. No. 3-U rack (above) accommodates 12; No. S-6 customer (right) accommodates 6. Single or double (back-to-back) units in lengths to fit any available space. Strongly welded, heavy gauge furniture steel; baked enamel finish—modern office colors. Standard in offices, factories, schools, churches, clubs, restaurants and institutions.



No. S-6
for private or small office.

Write for Bulletin OV-22

VOGEL-PETERSON CO.

"The Coat Rack People"

1121 W. 37th ST. • CHICAGO 9, ILL.

(Circle 313 for more information)

March 1955

Used corrugated cartons renewed with matched color paint

A new carton-colored paint is especially designed to help reduce shipping costs by utilizing otherwise discarded boxes. Many used cartons could be re-used by shipping departments if there were some way to mask old advertising printing or another company's name.

The repainted cartons look like new,



and dry to a finish in 20 minutes. The paint is odorless and non-flammable.

For more information, write to Luminall Paints, Div. of National Chemical & Mfg. Co., 3617 So. May Street, Chicago, Ill.; or circle number 393 on the Reader Service Card.



New stair climbing truck with power drive and brakes

A new stair climbing hand truck is equipped with a special ratchet mechanism which enables it to roll up stairs, step by step, as the operator pulls a cable drive. It safely increases the load a man can roll up or down stairs or ramps.

Two-wheel safety brakes are incorporated in the truck to prevent serious accidents when descending ramps or stairs with heavy loads, since they allow perfect control at all times. Features such as interchangeable shoes, sealed ball bear-



ings, and steel tube construction assure load flexibility and a long, efficient life.

The truck is equipped with large pneumatic tires which add to ease of operation and eliminate any marking of steps. Six different models are available for handling various sizes of loads including a special barrel cart and a complete welding cart.

For more information, write to Valley Craft Products, Inc., Div. of O'Neil-Irwin Mfg. Co., 750 Jefferson Avenue, Lake City, Minn.; or circle number 389 on the Reader Service Card.

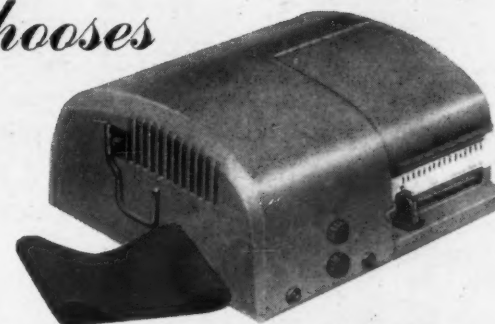
New offset solution improves quality of offset printing

A new "starting" solution for direct image paper plates used in general offset duplicating is applied to the direct image paper plate to condition the plate surface. The plate then readily accepts ink and fountain solution, resulting in fine, sharp, clean copies immediately.

For more information, write to Columbia Ribbon & Carbon Manufacturing Company, Glen Cove, N. Y.; or circle number 377 on the Reader Service Card.

A FACT OF VITAL INTEREST TO EVERY OFFICE:

one of the
largest insurance
companies in
America chooses
Peirce
magnetic
belt
dictation



The world's most advanced dictation system, with exclusive design — performance that combines all 10 most wanted features, plus Instant Thought Review. Precision Engineering . . . Minimum Service . . . Full 15-Minute Recording . . . Transcriber Speed Control . . . Absolute Interchangeability of Reusable Magnetic Belts . . . Years Ahead Styling . . . Combines Both Dictating — Transcribing . . . Error-Free Dictation . . . 2 Week Free Trial in your own office under your own conditions.

NOW—YOUR CHOICE OF 3 NETWORK SYSTEMS

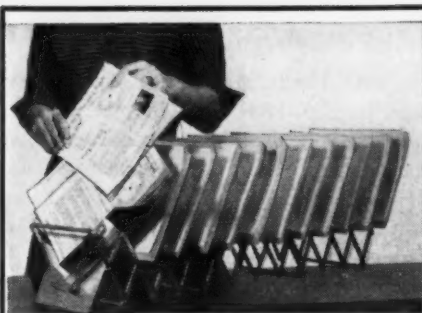
1. Microphone Network
Lowest cost network dictation for lighter, less frequent dictation.
2. Heavy Duty Network
Network dictation for offices with heavy dictation loads.
3. Newest Development
Network Dictation associated with your regular telephone.

Dealers And Service In All Principal Cities

PEIRCE DICTATION SYSTEMS

5900 NORTHWEST HIGHWAY, CHICAGO 31, ILLINOIS

(Circle 297 for more information)



FREE with each Evans GATHERING RACK

Paper fumbling goes—when you use Tacky-Finger in all paper handling.



COLLATE even faster than 3,500 sheets an hour from Evans GATHERING RACK.

ALUMINUM RACKS are vertical or horizontal, with 6, 12 or 18 sections. Each section holds 500 sheets at inclined angle. Non-skid in use, racks collapse for setting aside.

JOGGER, aluminum, fits end of any TU (horizontal) Rack. Worker drops gathered sets criss-cross into Jogger; taps handle as hand lifts forward to resume gathering; sets jog neatly for removal.

SHOWN: 12-section TU Rack with Jogger. Rack is \$16.50—Jogger \$10.00.

(7 other Racks from \$10.00 to \$25.00).

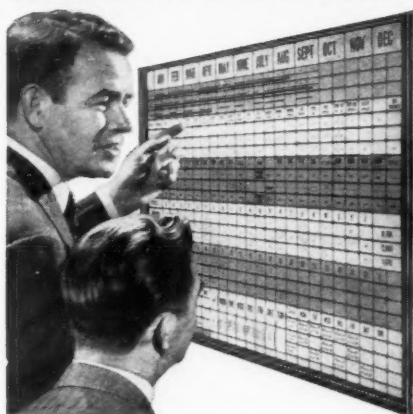
Tacky-Finger—Box of 12—\$6.00

See Your Dealer or Write:

Evans Specialty Co., Inc.
421 N. Munford St., Richmond 20, Va.

(Circle 271 for more information)

You Get Things Done With Boardmaster Visual Control



- ☆ Gives Graphic Picture of Your Operations—Spotlighted by Color
- ☆ Facts at a glance—Saves Time, Saves Money, Prevents Errors
- ☆ Simple to operate—Type or Write on Cards, Snap in Grooves
- ☆ Ideal for Production, Traffic, Inventory, Scheduling, Sales, Etc.
- ☆ Made of Metal. Compact and Attractive. Over 50,000 in Use

Complete price **\$49⁵⁰** including cards

FREE

24-Page BOOKLET NO. M-500
Without Obligation

Write for Your Copy Today

GRAPHIC SYSTEMS

55 West 42nd Street • New York 36, N. Y.

(Circle 318 for more information)

New desk tops of high-pressure laminated plastic

A new plastic desk top, formed in high-pressure laminated plastic, presents a high resistance to heat and is not affected by solutions that might ruin ordinary desk



tops. Non-porous, it never needs painting or refinishing. It is claimed to be virtually indestructible in normal use. The desks come in single or double-pedestal styles.

For more information, write to the Western Manufacturing Company, Aurora, Ill.; or circle number 374 on the Reader Service Card.



New "package" electric buzzer paging system

A new electric buzzer paging system is engineered so you can buy it complete in one "package." All you need to install is the relay box, the push-button control box, plus the buzzers for the individual locations; any number up to 20 can be used. The system operates on ordinary 115-volt AC current.

The operator, with only two fingers, can sound the signals for up to 20 people. At the receiving end, the buzzers give a loud, clear call, easily heard above the competing noise of factory or office. Each call is automatically repeated three times in 15 seconds, and a "repeat" button on the control board gives further repetition of the signals if needed.

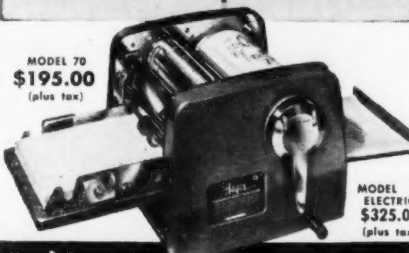
For more information, write to the Line Electric Company, Newark, New Jersey; or circle number 382 on the Reader Service Card.

New filing system for addressing-masters

Holder cards re-inforce typed master slips to be held for repeat impressions. They fit 3" x 5" card trays and can be equipped with tabbed index guides. Address cards stacked in the same order can be replaced in the file without re-sorting. This new system of filing masters can be easily set up in any office.

The folded holder card has approxi-

"Always Makes a Good Impression"



Heier CONQUEROR SPIRIT DUPLICATORS

with **ALL** the features . . .

- Print 120 or more copies per minute.
- Print 1 to 5 colors, in one operation.
- For sharp, clean, copies Conqueror features include—Raise-and-Lower Control . . . Adjustable Fluid Control . . . Built-in Reset Counter . . . Pressure Control . . . Positive Rotary Feed.

The Heier Conqueror Model 76, Spirit of '76 gives you for the first time "push-button" automatic electric duplicating . . . gives you complete freedom from manual effort.

Write today for descriptive booklet

THE HEIER CORPORATION

1832 S. Kostner Ave. Chicago 23, Illinois
Quality Duplicators and Supplies Since 1903
(Circle 280 for more information)

NOW-STAPLE Automatically

A
Necessity
In
Modern
Business!



SAVES TIME . . . TOIL . . . MONEY!

STAPLEX is the Automatic Electric Stapler . . . Time-tested . . . Thousands in profitable use.

PAYS FOR ITSELF in no time by cutting Stapling time and costs 70% and more.

EFFORTLESS . . . Staples automatically . . . leaves both hands free to work . . . always top Stapling efficiency.

RELOADS IN 2 SECONDS from the front. No tools needed . . . Uses Standard Size Staples.

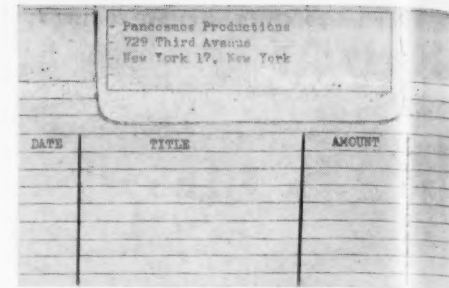
THE **Staplex** CO.

776 5th Ave.
Brooklyn 32,
New York

☐ Literature
☐ Free Demonstration

NAME
ADDRESS
COMPANY
3-55

(Circle 324 for more information)



mately the same record keeping area as a 5" x 7" file card, and can be used for keeping any record such as service follow-ups, prospect information, receivable records, personnel information, etc.

For more information, write to Master Addresser Company, 6500 West Lake Street, Minneapolis, Minn.; or circle number 391 on the Reader Service Card.



New moistener speeds envelope sealing and label application

A new model moistener works faster and cleaner in moistening envelopes, labels, and stamps, according to the manufacturer. This new unit has a platen which guides envelope flaps across the brush, assuring proper moistening.

Envelopes may be moistened individually or in groups. For multiple sealing, up to a dozen envelopes can be fanned out, and moistened simultaneously.

The device also can be used as a finger moistener to help in the accurate handling of papers or counting of money.

For more information, write to E. W. Pike & Company, Inc., 494 North Avenue, Elizabeth, N. J.; or circle number 375 on the Reader Service Card.



Filing systems for engineering drawings described in booklet

A new 16-page booklet illustrates different types of practical units for the filing of engineering drawings. Among the items described are full-depth files, drawer units, vertical folders, and pigeonhole cases for filing rolled drawings. Full specifications are listed along with helpful planning suggestions for the use of the equipment.

For a free copy of this booklet, write to the Art Metal Construction Company, Jamestown, N. Y.; or circle number 373 on the Reader Service Card.

NOW!

Quickly, Easily, Effectively Destroy confidential papers, records in your own office!

NEW SHREDMASTER Bantam 10

portable shredding machine designed especially for office use! Quiet, compact, streamlined!

Never before an office shredding machine combining the speed and economy of the new SHREDMASTER BANTAM 10. Anyone can operate it. No fuss, no trouble! Greater cutting width, speed, capacity, and power than ever before! Safety throat! Smart functional design, about size and weight of business typewriter.

Priced well within the budget of all businesses - large or small.



YOUR PAPERS GO IN HERE

FREE: Colorful, illustrated, descriptive folder, includes 10 DAY FREE TRIAL details. Write "SHREDMASTER BANTAM 10" on your letterhead or postcard, and mail today to:

UNREADABLE SHREDS COME OUT HERE

The SHREDMASTER Corporation

A Division of Self Winding Clock Company, Inc.

199 Willoughby Avenue
Brooklyn 5, N. Y.

Priceless Security at Low Cost

A new type of office machine, the Shredmaster Bantam 10 portable shredding machine, quickly and effectively destroys confidential office records and correspondence. You eliminate danger of vital papers falling into hands of unauthorized individuals.

What makes the Shredmaster Bantam 10 ideal for office usage is that it is attractive in appearance, quiet, compact, and streamlined. It plugs in just like an electric typewriter or adding machine, and is immediately ready to operate.

Made by The Shredmaster Corporation, known throughout the world as the leading manufacturers of shredding machines, the Shredmaster Bantam 10 can be operated by clerks, stenographers, or other office help.

A Free Shredmaster Bantam 10 brochure is available without charge simply by addressing a letter or postcard to **The Shredmaster Corporation**
199 Willoughby Avenue
Brooklyn 5, N. Y.

(Circle 309 for more information)

Contemporary design chairs feature combination leather-fabric covering

A new custom line of chairs designed in the contemporary manner is currently available in three different styles. Each style comes in matching swivel chairs, arm chairs, and side chairs. They are all up-



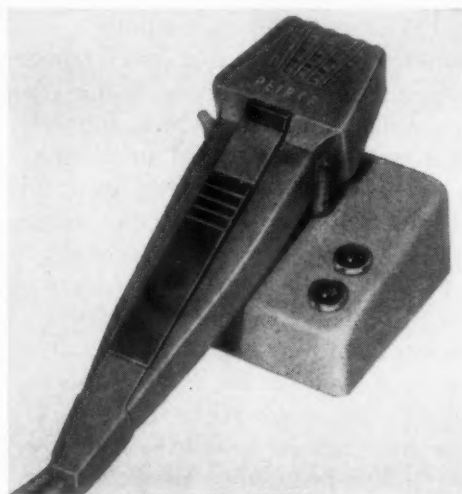
holstered in combinations of fabrics and genuine top-grain leathers, or fabrics and plastic, in a wide choice of colors and color combinations. Seats are cushioned with foam rubber and a choice of wood finishes over walnut is available.

For more information, write to **The B. L. Marble Chair Company**, Bedford, Ohio; or circle number 383 on the Reader Service Card.



Remote dictating equipment contains complete controls in microphone

A new remote control microphone has all the controls self-contained in its handle.



This magnetic dictation equipment can be quickly and easily installed, and an unlimited number of microphone dictation instruments may be connected into it.

For more information, write to **The Peirce Dictation Systems**, 5900 Northwest Highway, Chicago, Ill.; or circle number 371 on the Reader Service Card.

SIGNALS FOR BUSINESS

Nu-Vise

METAL PROJECTING SIGNALS

Nu-Viz

METAL SIGNALS for "visible" systems

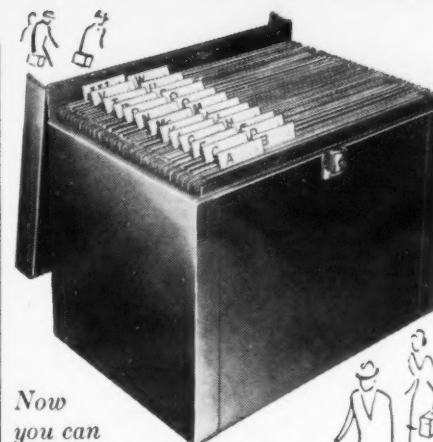
Cellugraf

TRANSPARENT SIGNALS for "visible" systems

Exert new control over any type of office system with **Graffco** Signals. They never forget. Always there to stop, start, check, alert. Your office supply dealer will be glad to explain what they can do for your particular needs.

GEORGE B. GRAFF CO.
54 Washburn Avenue
Cambridge 40, Mass.

(Circle 277 for more information)



Now you can

TAKE IT WITH YOU -

Oxford

"Carry File"



with

PENDAFLEX®

HANGING FOLDERS

EXECUTIVES: Your stylish "traveling office", for reports, letters, minutes.

SALESMEN: Carry price books, photos, testimonials, samples, other sales data.

HOME "MANAGERS": Perfect for household papers—bills, budget, taxes, insurance.

Made of lightweight steel, tan finish. Brass lock, leather handle, piano-hinge. Holds 25 Pendaflex celluloid-tab hanging folders, which can't slump or sag. Clip for free catalog, name of dealer.

Oxford Filing Supply Co., Inc.
20 Clinton Road Garden City, N.Y.

(Circle 295 for more information)

Now! Photocopies under fluorescent lights with

Copease* Duplex

PHOTOCOPIER

with new Lite-Visor†



Coupon brings FREE 3-day trial in your office

Now you can operate **Copease Duplex Photocopier** anywhere in the office! New Lite-Visor attachment with full-view Plexiglas top permits use under brightest room lights, even low-hanging fluorescents, without pre-exposure. **Copease** makes sharp, dry copies of anything on paper... in seconds! Mail coupon for free 3-day trial in YOUR office!

†Patent applied for

*Trademark

COPEASE CORPORATION
270 Park Ave., New York 17 Box MM3
Offices:
New York, 270 Park Ave.
PLaza 3-6692
Los Angeles, 3563 Wilshire Blvd.
DUUnkirk 5-2881
Chicago, 201 N. Wells St.
ANdover 3-6949
Distributors in Principal Cities

Gentlemen: I'd like to have a free 3-day trial of COPEASE with new Lite-Visor in my office. ☐

Please send free literature (check one) ☐

Name _____ Title _____

Firm Name _____ Address _____

City _____ State _____

(Circle 331 for more information)

form design

Multi-copy payroll form replaced

by R. W. Gilmour, Supervisor, Procedures & Systems Section
Ford Motor Company, Dearborn, Michigan

We developed a six-part, carbon, snap-out, consolidated payroll deduction form to replace eight separate forms previously used in processing accessions to the hourly payrolls. Copies are distributed to Payroll, employees, Local Union, bank (for savings bonds issuance), and the group insurance and hospital insurance offices.

Information common to all offices,

such as Social Security Number, Badge Number, Location, Name and Address, is entered at the top of the form. This design enables the information to be reproduced simultaneously on all copies where it is required. Previously this was accomplished by typing or plating individual forms. Verification of typewritten information is required only once whereas under the old pro-



THIS FORM MUST BE TYPEWRITTEN.
FOR SEPARATION, EXTRACT ALL CARBONS AND EXTENDED DUPLICATE (EMPLOYEE COPY), THEN EXTRACT INTERNAL PARTS AS NECESSARY.

EMPLOYEE INFORMATION:
NAME: LAST, FIRST, MIDDLE INITIAL, LOCATION, ACTIVITY
ADDRESS: NUMBER, STREET, CITY, ZONE, STATE, BIRTH DATE, SEX, MARITAL STATUS, RACE

APPLICATION FOR GROUP INSURANCE:
I hereby advise that the insurance to which I am now entitled or to which I may become entitled under the provisions of Group Policy or Policies issued to me by the Ford Motor Company, is being continued or renewed. I understand that this insurance will be continued or renewed only if the required premium contribution toward the cost of the insurance, as determined by the Ford Motor Company, is received by the Ford Motor Company on or before the date specified in the notice of renewal. I agree to pay the required premium contribution toward the cost of the insurance, as determined by the Ford Motor Company, on or before the date specified in the notice of renewal. I agree to pay the required premium contribution toward the cost of the insurance, as determined by the Ford Motor Company, on or before the date specified in the notice of renewal.

PAYROLL DEDUCTION PLAN FOR U.S. SAVINGS BONDS:
I hereby authorize the Ford Motor Company to make deductions from my wages at salary beginning on the date indicated above, and each time the amount required for the purchase of bonds designated by accumulated to my credit. I understand that they will be used by the Ford Motor Company as an accumulation deduction. In the event of my death, Ford Motor Company shall pay to the above designated trustee or beneficiary the amount of accumulated deductions to my credit which have not been expended for the purchase of bonds.

UNITED FOUNDATION CONTRIBUTION PLAN:
I hereby authorize the Ford Motor Company to make deductions from my wages at salary beginning on the date indicated above, and each time the amount required for the purchase of bonds designated by accumulated to my credit. I understand that they will be used by the Ford Motor Company as an accumulation deduction. In the event of my death, Ford Motor Company shall pay to the above designated trustee or beneficiary the amount of accumulated deductions to my credit which have not been expended for the purchase of bonds.

BLUE CROSS-BLUE SHIELD APPLICATION:
I hereby authorize the Ford Motor Company to make deductions from my wages at salary beginning on the date indicated above, and each time the amount required for the purchase of bonds designated by accumulated to my credit. I understand that they will be used by the Ford Motor Company as an accumulation deduction. In the event of my death, Ford Motor Company shall pay to the above designated trustee or beneficiary the amount of accumulated deductions to my credit which have not been expended for the purchase of bonds.

EMPLOYEE'S WITHHOLDING EXEMPTION CERTIFICATE—HOW TO CLAIM YOUR WITHHOLDING EXEMPTIONS:
1. If SINGLE, and you claim an exemption, write the figure "1".
2. If MARRIED, and you claim an exemption, write the figure "2".
3. If you claim BOTH of these exemptions, write the figure "3".
4. If you are or your wife are blind, and you claim this exemption, write the figure "4".
5. If you are or your wife are blind, and you claim this exemption, write the figure "5".
6. If you are or your wife are blind, and you claim this exemption, write the figure "6".
7. If you are or your wife are blind, and you claim this exemption, write the figure "7".
8. If you are or your wife are blind, and you claim this exemption, write the figure "8".
9. If you are or your wife are blind, and you claim this exemption, write the figure "9".
10. If you are or your wife are blind, and you claim this exemption, write the figure "10".

cedure, several verifications were required. Carbon has been banded for use on four of the six copies in order to block out information which is not common on all copies. A gummed label included as a part of the form is attached to the Group Insurance Certificate, thereby replacing the typing of such information as employee's name, address, and beneficiary on this record.

The top of the deduction form has also been designed to facilitate preparation of an expendable stencil which is typed simultaneously with the typing of the form. After typing, the stencil is removed and used in a hand-operated duplicating device to enter common information on other forms initiated when an employee is hired.

Previously the hourly employee was not furnished copies of the various deductions which he had authorized. The employee now receives the duplicate copy for his information. The back of this copy reflects instructions relative to Group Insurance, Hospitalization Insurance, and Withholding Exemptions. This change has decreased the number of inquiries from employees relative to the deductions they authorized at the time of accession, and the time required to complete forms processed when an employee is hired has been reduced approximately 50%.

ADVERTISING INDEX

Acco Products, Inc.	12
Agency: LaPorte & Austin, Inc.	
Acme Visible Records, Inc.	33
Agency: E. H. Brown Advertising	
R. C. Allen Business Machines, Inc.	32
Agency: Wesley Aves & Associates Inc.	
American Hardware Corp.—	
Corbin Wood Products Div.	46
Agency: Horton-Noyes Co.	
American Lithofold Corp.	4
Agency: Burlingame-Grossman Advertising	
American Numbering Machine Co.	53
American Writing Paper Corp.	53
Agency: Fairfax, Inc.	
Bankers Box Co.	24
Agency: Frank C. Jacobi Advertising	
Charles Bruning Co., Inc.	25
Agency: H. W. Kastor & Sons Advertising Co.	
Burroughs Corp.	8
Agency: Campbell-Ewald Co.	
Calculagraph Co.	48
Agency: George Homer Martin Associates	
Can-Pro Corp.	31
Agency: Ramsthal Advertising	
Chart-Pak, Inc.	10
Agency: O. S. Tyson & Co., Inc.	
Chrysler Corp.	43
Agency: Grant Advertising, Inc.	
Clarín Manufacturing Co.	51
Agency: Goodkind, Joice & Morgan, Inc.	
Columbia Ribbon & Carbon Mfg. Co., Inc.	52
Agency: E. M. Freytag Associates, Inc.	
Commercial Controls Corp.	11
Agency: Hutchins Advertising Co., Inc.	
Convoy, Inc.	55
Agency: Rex Farrall Inc.	
Copease Corp.	57
Agency: Anderson & Cairns, Inc.	
Corry-Jamestown Mfg. Corp.	45
Agency: Walker & Downing	
Cummins-Chicago Corp.	24
Agency: Aubrey, Finlay, Marley & Hodgson Inc.	
A. B. Dick Co.	60
Agency: Fuller & Smith & Ross Inc.	
Dictaphone Corp.	18
Agency: Young & Rubicam, Inc.	
E. I. DuPont de Nemours & Co., Inc.	14
Agency: Batten, Barton, Durstine & Osborn, Inc.	
Evans Specialty Co., Inc.	56
Agency: Virginia S. Morton Advertising	
Felt & Tarrant Mfg. Co. (Dictation)	15
Agency: Tim Morrow Advertising	
Felt & Tarrant Mfg. Co. (Comptometer)	29
Agency: N. W. Ayer & Son Inc.	
The General Fireproofing Co.	2
Agency: The Griswold-Eshleman Co.	
The Globe-Wernicke Co.	5
Agency: Strauchen & McKim Advertising	
The Golden Gate	30
Agency: Roland-Bodee & Flint Advertising	
GR Products, Inc.	28
Agency: Norman-Navan, Inc.	
George B. Gaff Co.	57
Agency: The Eddy-Rucker-Nickels Co.	
Graphic Systems	56
Agency: Diener & Dorskind Inc.	
Gray Manufacturing Co.	20
Agency: French & Preston, Inc.	
The Haloid Co.	31
Agency: Hutchins Advertising Co., Inc.	
The Heyer Corp.	56
Agency: Frank C. Jacobi Advertising	
Imperial Desk Co.	20
Agency: Keller-Crescent Co.	

Handdale Products Corp.	31
Agency: Sanders & Thomas Inc.	
Lee Products Co.	54
Agency: Wm. L. Baxter Advertising	
LeFebure Corp.	49
Agency: Chester A. Ettinger Advertising	
Linen Supply Association	34
Agency: George H. Hartman Co.	
The McBee Co.	19
Agency: C. J. LaRoche & Co., Inc.	
G. & C. Merriam Co.	27
Agency: Horton-Noyes Co.	
Merrill Lynch, Pierce, Fenner & Beane	10
Agency: Albert Frank, Guenther Law	
Metalcraft, Inc.	30
Agency: Altman-Gilbert Advertising	
The Mills Co.	40
Agency: Meermans, Inc.	
Moore Business Forms, Inc.	37
Agency: N. W. Ayer & Son Inc.	
National Cash Register Co.	16
Agency: McCann-Erickson, Inc.	
Olivetti Corporation of America	3
Agency: Geyer Advertising, Inc.	
Outlook Envelope Co.	28
Agency: Arthur C. Barnett Advertising	
Owens-Corning Fiberglas Corp.	38
Agency: McCann-Erickson, Inc.	
Oxford Filing Supply Co.	57
Agency: Joseph Reiss Associates	
Parsons Paper Co.	22
Agency: Wilson, Haight, Welch & Grover, Inc.	
Peirce Dictation Systems	55
Agency: The Gertsel Agency, Inc.	
Photostat Corp.	13
Agency: Knight & Gilbert Inc.	
E. W. Pike & Co., Inc.	48
Agency: Oliver-Beckman Inc.	
Pitney-Bowes Inc.	35, 50
Agency: L. E. McGivena & Co., Inc.	
Record Controls, Inc.	10
Agency: Campbell-Sanford Advertising Co.	
Recordak Corp.—	
Subsidiary of Eastman Kodak Co.	23
Agency: J. Walter Thompson Co.	
Remington Rand Inc.	26
Agency: Leeford Advertising, Inc.	
The Reynolds & Reynolds Co.	59
Agency: Weber, Geiger & Kalat, Inc.	
Rising Paper Co.	24
Agency: Gordon Baird Associates	
Rite-Line Corp.	54
Agency: E. M. Freystadt Associates, Inc.	
Robertson Photo-Mechanix, Inc.	54
Agency: Hitchcock & Becker Advertising	
Royal Metal Mfg. Co.	41
Agency: Kuttner & Kuttner, Inc.	
Rudd-Melikian, Inc.	6
Agency: Geare-Marston Advertising	
The Shredmaster Corp.	57
Agency: Cayton, Inc.	
Spartan Stationers	54
The Staplex Co.	56
Agency: Lee Keeler, Inc.	
The Sturgis Posture Chair Co.	46
Agency: Blaco Advertising	
S.P.A.-Workshop for Management	17
The Todd Co.	47
Agency: The Merrill Anderson Co., Inc.	
U.S. Plywood Corp.	42
Agency: Kenyon & Eckhardt, Inc.	
Victor Safe & Equipment Div.	50
Agency: Leeford Advertising, Inc.	
Vogel-Peterson Co.	55
Agency: Ross Llewellyn Inc.	
Vassell Organization	51
Agency: James R. Flanagan Advertising	
Watson Mfg. Co., Inc.	28
Agency: Griffith & Rowland	
Weber Addressing Machine Co.	49
Agency: Glenn, Jordan, Stoetzel Inc.	
F. S. Webster Co.	36
Agency: Batten, Barton, Durstine & Osborn, Inc.	
Wellington Sears Co.	7
Agency: Ellington & Co., Inc.	
M. G. Wheeler Co., Inc.	47
Agency: Woodward & Byron Inc.	

Yes, *Precision-made* Accounting Machine Forms are an important team mate to your precision made Accounting Machines. To obtain maximum accounting efficiency you must use quality forms . . . forms that are carefully produced to fulfill your individual requirements, forms that register perfectly, and forms that are printed on the proper paper stock to withstand handling and yet give perfectly legible copies.

Team-up Reynolds & Reynolds *Precision-made* Accounting Machine Forms with your Accounting Machine for greatest accounting efficiency.

WRITE TODAY FOR COMPLETE INFORMATION!

THE REYNOLDS & REYNOLDS COMPANY

BUSINESS FORMS SINCE 1866

PLANTS: DAYTON, OHIO; DALLAS, TEXAS; LOS ANGELES, CALIF.

OFFICES IN MOST PRINCIPAL CITIES

(Circle 304 for more information)



NOW we keep a duplicator in the vice-president's office

It's AZOGRAPH—the new, easy way to make copies of written, typed and drawn material in a hurry—for example, copies of confidential memos, special reports and the like. Here is a process that is low in cost and it is clean—completely clean every step of the way—clean in the preparation of masters on through the production of copies.

For full information simply clip the *Information Request form to your letterhead and mail to A. B. Dick Company—5700 Touhy Avenue—Chicago 31, Illinois.

*Information
Request
Dept. MM-35
See Text



A·B·DICK

THE FIRST NAME IN DUPLICATING

A. B. DICK,  and AZOGRAPH are registered trade marks of A. B. Dick Company.

(Circle 267 for more information)

Management

m e t h o d s

Published by

MANAGEMENT MAGAZINES, INC.

141 E. 44th St., New York 17, N. Y.

TO



R